REPORT RESUMES

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PROCEEDINGS OF A NATIONAL WORKSHOP ON IMPROVED OPPORTUNITIES FOR THE DEAF (UNIVERSITY OF TENNESSEE, OCTOBER 18-22, 1964).
BY- OTT, JOSEPH T.
VOCATIONAL REHABILITATION ADMIN., WASHINGTON, D.C.
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PARTICIPANTS IN A FOUR DAY WORKSHOP ON VOCATIONAL NEEDS OF THE DEAF INCLUDED EDUCATORS OF THE DEAF, REHABILITATION WORKERS, DEAF PERSONS, PARENTS OF DEAF CHILDREN, AND REPRESENTATIVES OF LABOR AND GOVERNMENT. FOUR TOPICS WERE DISCUSSED--(1) EVALUATION OF EXISTING VOCATIONAL TRAINING PROGRAMS, (2) NEEDED EXPANSION IN VOCATIONAL TRAINING PROGRAMS, (3) STAFF RECRUITING AND PREPARATION, (4) ANCILLARY SERVICES. SOME AREAS OF CONSENSUS WERE--PRESENT VOCATIONAL TRAINING PROGRAMS ARE INADEQUATE. THERE IS A NEED FOR ONE NATIONAL VOCATIONAL-TECHNICAL SCHOOL FOR THE DEAF SUPPLEMENTED BY REGIONAL VOCATIONAL SCHOOLS. THERE SHOULD BE UPGRADING OF PRE-SERVICE AND IN-SERVICE TRAINING OF STAFF. BETTER COMMUNICATION BETWEEN TEACHERS AND DEAF STUDENTS IS NECESSARY. THERE IS A NEED FOR IMPROVED RELATIONSHIPS BETWEEN PROFESSIONAL DISCIPLINES AND LABOR, BUSINESS, AND INDUSTRY. THERE SHOULD BE A CLEARINGHOUSE FOR DISSEMINATION OF INFORMATION ABOUT THE DEAF. MORE RESEARCH IS NEEDED IN ALL AREAS. THE APPENDIX CONTAINS NINE ARTICLES ON VOCATIONAL AND EDUCATIONAL PROBLEMS OF THE DEAF AND THE ROSTER OF PARTICIPANTS. THIS DOCUMENT WAS REPRODUCED BY THE VOCATIONAL REHABILITATION ADMINISTRATION, U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, WASHINGTON, D. C. (HK)

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Proceedings of a National Workshop on Improved Opportunities for the Deaf

OCTOBER 18-22, 1964

The University of Tennessee, Knoxville

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Washington, D.C. - June 1965

PROCEEDINGS

# of a National Workshop on Improved Vocational Opportunities for the Deaf

The University of Tennessee
Knoxville

October 18 - 22, 1964

Marshall S. Hester, Director

Joseph T. Ott, Editor

Topic Editors-

Merle B. Karnes
William J. McClure
Howard M. Quigley
Hugo F. Schunhoff

Sponsor: Vocational Rehabilitation Administration
Department of Health, Education and Welfare

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Marshall S. Hester

Assistant Director

Delmas N. Young

Executive Committee

Edmund B. Boatner
Roger M. Frey
W. Lloyd Graunke
Ray Karnes
E. C. Merrill
John Sessions
Norman L. Tully
Boyce R. Williams

Consultants

Ralph H. Hoag
Ray Karnes
Earl T. Klein
L. Deno Reed
Robert G. Sanderson
John Sessions

Local Arrangements

Roger M. Frey
W. Lloyd Graunke
Uriel C. Jones
E. C. Merrill
Norman L. Tully
Delmas N. Young

Topic Chairmen

Edgar L. Lowell
Kenneth R. Mangan
Stanley D. Roth
Edward W. Tillinghast

Editor

Joseph T. Ott

Topic Editors

Merle B. Karnes
William J. McClure
Howard M. Quigley
Hugo F. Schunhoff

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FOREWORD

For some years educators of the deaf and others working in or on the periphery of the education of the deaf have increasingly been concerned with the need for improving the vocational training of deaf people. More recently automation and enlarged and improved vocational training opportunities for non-handicapped people have made this need an urgent one.

The University of Tennessee Workshop on Improved Vocational Opportunities for the Deaf is the first one of national scope to bring together representatives of all areas of interest as participants in a conference for airing of the complex problems involved and an attempt at proposing practical solutions to those problems.

The high purpose and excitement which were evidenced at the Workshop are not easy to recapture adequately on paper. Those whose genuine interest in the deaf prompts their reading of this paper, however, may get a sense of the dedication and determination which underlay the actions of the participants.

Great needs generate calls for great measures, and the sense of urgency which marked the Workshop gave proof of the unanimity of conviction that the situation of the deaf today demands virtually immediate action. The hour is late.

Participants were selected from among educators of the deaf, rehabilitation workers, deaf persons, parents of deaf children, labor, and government. (Futile efforts were made to include representatives of industry and management.) Those present provided a broad spectrum of persons interested in the overall vocational training and rehabilitation of the deaf. In addition, they represented the several philosophies concerning the education of the deaf and the varying schools of thought relating to the vocational training of the deaf. Finally, they represented those interested in trade and technical education and labor.

This group, made up of such diverse backgrounds and interests, quickly agreed on the major problem areas and the urgent need for prompt solutions. Although there was a strong tendency toward a consensus, participants proposed several solutions to the vocational training problems of the deaf.

In addition to the delineation of the problems and suggestions for solutions presented in this report it is hoped that the Workshop will result in a widespread increase of interest in improving vocational opportunities for the deaf.

The Workshop was arranged and conducted under the direction of the executive committee: Dr. Edmund B. Boatner, Dr. Roger M. Frey, Dr. W. Lloyd Graunke, Dr. Marshall S. Hester, Dr. Ray Karnes, Dr. E. C. Merrill, Dr. John Sessions, Mr. Norman L. Tully, and Dr. Boyce R. Williams. Mr. Delmas N. Young, assistant director, is to be commended for his work in carrying out the direction of the executive committee and his efficient handling of the correspondence and the countless details relating to the Workshop.

Particular thanks should be extended to the Vocational Rehabilitation Administration for its financial support and guidance, and to Commissioner Mary Switzer, Dr. Boyce R. Williams, and Dr. L. Deno Reed from the VRA Office.

The guidance and assistance of Dr. Ralph H. Hoag, Specialist, Educational Programs for the Deaf, U. S. Office of Education, in structuring the Workshop is highly appreciated.

The University of Tennessee contributed greatly to the success of the Workshop through its sponsorship and the cooperation of Dean E. C. Merrill and the staff of the College of Education, and the warm welcome extended by its president, Dr. A. D. Holt.

The Tennessee School for the Deaf and members of its staff cooperated in a variety of ways in developing and carrying on the Workshop for which we extend our thanks.

The recorders, assistant editors and Editor Joseph T. Ott are to be commended for the collective effort which made this report possible.

It is hoped that the Workshop and the report of its activities, findings, and recommendations will provide the desired impetus for development which will result in improved vocational opportunities for the deaf.

Marshall S. Hester

INTRODUCTION TO THE WORKSHOP: BACKGROUND AND PLANNING

W. Lloyd Graunke, Superintendent
Tennessee School for the Deaf

Vocational education for the deaf has been a serious concern to all of us in the field of education for the deaf almost since the beginning of our programs.

When land-grant colleges, of which the University of Tennessee is one, were being established in this country, their concern was for the establishment of more technical educational centers, for manual or mechanical trades or agriculture. And, the administrators for the Tennessee School for the Deaf, founded in 1844, established their first department for mechanical trades in 1869.

More recent concern has been expressed by educators of the deaf as far back as the Convention of American Instructors of the Deaf in 1947, at which serious consideration was first given to the post-World War II vocational education program. The past 17 years have been spent trying to assess these problems and to determine the needs. The paper presented by Dr. Boatner has, I think, explained in very fine terms the consideration we have for the prospect of establishing regional or national vocational or technical, or both, types of schools. Dr. Silverman has already cited his and our concern for the occupational future of the deaf as given in his keynote speech to the International Congress on Education of the Deaf a year ago last summer. At the meeting of the Conference of Executives, just prior to the International Congress, concern with this problem was so marked that a standing committee on vocational education was established with the avowed purposes of studying new approaches to meeting the vocational education needs of our students.

VRA Recognizes Need

As early as August 1963, following the International Congress, representatives of the Arkansas School for the Deaf met with Miss Mary Switzer, Commissioner of Vocational Rehabilitation, for exploratory discussions relative to the possibility of a regional vocational school for the deaf. These discussions have resulted in the recognition by VRA of the need for broader, more objective studies of training and placement problems and of other approaches to meeting present and future needs for the deaf.

The Vocational Rehabilitation Administration's interest had been aroused, and another meeting was set for December 1963 in which Dr. Marshall S. Hester expressed the concern of the Conference of Executives for this approach. It was decided at that meeting to seek a university already holding a training contract with VRA to which a grant could be attached for support of a preplanning conference to organize a study conference. The University of Tennessee has such a contract. Through the sympathetic interests of Dr. E. C. Merrill, Dean of the College of Education, and the administration of the University of Tennessee, application was made and subsequently approved for the preplanning conference.

Three-Day Planning Session Held

The grant involved the University of Tennessee and Conference of Executives personnel, and at that preplanning meeting it was decided to invite representatives of special education, vocational rehabilitation, trade and technical education, organized labor, management, the U. S. Office of Education, the Department of Labor, and the President's Committee on the Employment of the Handicapped. Last May a three-day planning meeting was held at which the structure, philosophy, and personnel of this workshop were developed. It is our sincere hope that each of you has come to this workshop full of enthusiasm and a sense of challenge, and that what is accomplished this week will significantly shape the future vocational opportunities for the deaf in America. Each of you has been selected for the contribution which the Executive Committee feels you can make. Now, the rest is up to you.

Thank you.

WORKSHOP MECHANICS

Ralph L. Hoag
Educational Programs for the Deaf
U. S. Office of Education

The planning committee appears to have done a superb job developing the basic discussion topics for this conference. The organization of leading questions and issues as presented to you should serve as logical points of departure in your search for solutions to the problems involved in attempting to improve vocational opportunities for the deaf.

The planning committee was faced with the task of selecting the most efficient vehicle that would bring forth solutions to the problems to be dealt with during this conference. A presentation of the plan used for the recent National Conference on the Preparation of Teachers of the Deaf at Virginia Beach was requested by the committee. The plan offered was adopted as the one to be used.

The operational format of the Virginia Beach Conference contained adaptations of those previously used by the American Speech and Hearing Association for its 1963 National Conference on Graduate Education in Speech Pathology and Audiology, and by the American Psychological Association in its series of national meetings on the Training of Professional Personnel.

Four Topics Set by Committee

Many of the possible issues or topics to be dealt with were considered by the planning committee. After extensive review, it appeared to the group that most issues raised could logically be classified into one of four major topic areas. These were as follows:

I. Assessment and evaluation of existing vocational training programs
II. Needed expansion in vocational training programs
III. Recruiting and preparation of staff
IV. Ancillary services

Participants who had accepted invitations to attend the conference were assigned to one of the four major topic areas to serve as a member of the topic committee.

Following the first plenary session of the conference each of the four major topic committees met to further expand, identify, and record the issues in their respective topic areas. One-half of a working conference day was devoted to this task. Subsequently, the composition of discussion work groups was changed as each major topic was scheduled for discussion. All four work groups addressed themselves to the same topic at the same time. This procedure was followed throughout the conference until the final session when the original topic committees were reorganized. For each of the four half-day work sessions the structure of each work group was altered randomly so that every conferee had an opportunity to work on all topics and work with all participants by the end of the conference.

Short plenary meetings preceded each group work session to provide the particular topic chairman with an opportunity to review the suggested agenda of sub-issues resulting from the initial topic committee meeting. The recorder of each group work session was given the responsibility of writing a summary report of the discussion in the group to which he was assigned and then submitting it to the major topic editor concerned. Since all four groups on each half-day of the conference addressed themselves to a single topic area, the editor of each topic under consideration received reports from four recorders assigned to the study groups of each session.

The final morning of the four-day conference was devoted to the formulation of topic area consensus reports. To accomplish this task all participants returned to their original topic committees to review the discussion summaries of the previous group work sessions dealing with each topic area. The topic editor assigned to each committee prepared the topic committee consensus report. These reports in turn were submitted to the conference editor who was responsible for preparing the conference publication. The last plenary session of the conference was devoted to oral summary reports by the topic committee editors as a review of the results of the four-day meeting.

Chapter One

Topic I: Assessment and Evaluation of Existing Vocational Training Programs

Topic Chairman	**Edgar L. Lowell**
Topic Editor	**William J. McClure**
Topic Recorders	**Gary D. Blake** **Jack H. Haynes** **Ben E. Hoffmeyer** **Howard H. Rahmlow**

SUMMARY

The great need for improved and expanded vocational training and opportunities for the deaf was approached by members of Topic I committee by taking inventory of facilities presently available and evaluating them.

Consensus of the four groups which gave independent study to this question was that present programs are not adequately comprehensive. One group's definition of a comprehensive program was: a program serving all age groups of the deaf 16 and over and all ability groups, providing evaluation, counseling, personal and social adjustment training, vocational training, placement and follow-up services.

There are communities in which most, if not all, of these facilities are available and operating with limited success. The groups were not unmindful of these, and pointed to them as evidence of what can and should be done on a much wider scale if the community, state and nation are to discharge their obligation in helping the deaf to share in the full rights--and responsibilities--of today's society.

Taking stock of prevocational and vocational training in the general run of schools for the deaf, the four groups felt that a good job was being done in prevocational training. With a few exceptions, however, existing vocational programs were held to be inadequate or nonexistent. Relating to this latter point is the widely held opinion among educators of the deaf that residential and day schools are not the proper province of vocational training. Principal reasons supporting this view are: the students are not mature enough to profit from a demanding vocational program, budgets seldom permit the expensive and constantly changing equipment necessary, and good staff is scarce.

As in Workshop groups discussing other topics it was stressed that there is not enough opportunity for average deaf students, those who by their very numbers present the greatest need. While the public school vocational offerings serve the hearing student very well, and can be handled by the exceptional deaf student, lack of communication between the average deaf student and the public school instructor presents a generally insurmountable barrier.

Assessment was also made of the urgent matter of attitude on the part of the deaf student. It was widely felt that insufficient attention is being paid to arming the deaf with the proper frame of mind, or attitude, to prepare them to fit into the hearing world upon leaving school.

* * *

Topic Agenda: The guidelines for discussion of Topic I as set by the topic committee and given below were purposely all-inclusive to serve as thought-provoking items for group discussion. It was recognized that in the time allowed there would not be opportunity to delve deeply into each suggested item. This proved to be true, and the four groups meeting independently each addressed its attention to substantially the same points of principal importance as will be found in the body of the report.

Types of Programs

Prevocational, vocational and technical training programs for the deaf now operate in a variety of settings. Some serve a very limited clientele in a specific way. Others are broader in scope. Among the programs serving the deaf of different age groups and of varying abilities are the following:

A. Those located in a school and serving regularly enrolled students.

   1. In residential schools for the deaf.
   2. In day schools for the deaf.
   3. In public trade and technical schools.

      a. With regular teachers and hearing students.
      b. With trained teachers of the deaf.

   4. In colleges primarily for the hearing.

B. Those cooperating with schools for the deaf but serving clients in addition to the regular student body.

   1. Coordinated vocational rehabilitation-school for the deaf programs where the director of the rehabilitation program is responsible to the school administrator.

   2. School for the deaf administered Vocational Rehabilitation Centers serving other than regular students (alumni and others among the adult deaf.)

3. DVR supported summer programs at schools for the deaf staffed and operated by the schools.

C. Those which are located in facilities serving other types of handicapped individuals in addition to the deaf.

1. Sheltered workshops for the handicapped such as Goodwill Industries.
2. Cooperative Community Center-DVR programs providing various types of assistance to the handicapped.
3. Comprehensive rehabilitation centers providing a wide range of services including evaluation, training and placement.
4. Evaluation centers (without training facilities) which evaluate and recommend programs of training in other facilities.

The majority felt there was value in all of the programs listed above for certain segments of the deaf population. There was general agreement, however, that these existing programs do not adequately meet the needs of all types of the deaf nor are they available in all parts of our country. There has been great divergence in quality and variety of offerings in the programs provided in different facilities. Some have provided only evaluation and/or counseling services. Others have attempted to cover the entire range of vocational training services from evaluation to successful occupational placement. While some programs have apparently met with considerable success, there is a need to re-examine, revaluate and update the majority of existing programs to meet the needs of different ability groups in a changing vocational world. The needs of the deaf of limited, average and superior ability are quite different. Some programs have met the needs of a particular group better than they have met the needs of others. Improvement, however, is a universal need.

It was the consensus of the discussants that there are not enough comprehensive programs, particularly at the national level, serving all age groups 16 and over and providing evaluation, counseling, personal and social adjustment training, vocational training, placement and follow-up services for the deaf of all ability groups. The group felt some programs have not assumed their full responsibility for placement of the deaf client as their ultimate responsibility and the goal of counseling and training. This has even been true of Vocational Rehabilitation counselors in some instances.

The discussants felt this opinion is supported by a recent survey of the employment status of the deaf in the New England states which has been completed through a VRA grant to the American School for the Deaf in West Hartford, Connecticut. This survey shows that as a group the deaf are underemployed and in need of assistance to obtain positions commensurate with their numbers and their abilities. Preliminary information from a similar survey now underway in the southwestern states indicates the same conditions prevail there.

New Efforts

In an effort to meet the varying needs of the deaf, several new types of vocational training-rehabilitation programs (services) have been developed comparatively recently. The Alabama, Georgia, Mississippi, Tennessee and Wisconsin schools for the deaf with VRA assistance have recently established a Vocational Rehabilitation Center for deaf adults. Similar rehabilitation centers have been planned at several other state schools for the deaf. In the summer of 1964 the Indiana School for the Deaf operated with VRA support an intensive summer rehabilitation program for young deaf men of varying needs and abilities. In Arkansas and Virginia there are comprehensive rehabilitation centers serving many types of the handicapped, including the deaf. Experimental programs are being operated in Lansing, in Boston, and in St. Louis. Still, these programs are regarded as the exception, not as the rule, and there is an almost complete lack of opportunity for the deaf in some areas of our nation to obtain specialized services for which they have great need.

Coordinated vocational rehabilitation-school for the deaf programs have a tremendous potential for service to all which should be thoroughly investigated and utilized wherever possible. The value of these programs lies in the possibility of assembling in one facility experts in all phases and age ranges covered in academic and vocational training programs for the deaf.

Status of Vocational Training Programs in Schools for the Deaf

The discussants agreed that some schools for the deaf are better equipped than many public high schools for evaluation and training at the prevocational level, but schools for the deaf are questioning their programs and wondering if their offerings are adequate, if present equipment is suitable for even prevocational training and evaluation for employment in modern industry. Schools for the deaf often have great difficulty in acquiring and maintaining the equipment necessary for flexible, up-to-date programs. The enrollment in many is too small to justify the original capital outlay. Machinery and equipment are soon outdated for instructional programs and adequately trained instructors are difficult to obtain. There is a lack of ancillary services such as vocational counselors and guidance directors. Despite these difficulties, the discussants felt that state residential schools are often able to provide vocational training in one or two areas but that these areas serve adequately only a small percentage of the students enrolled before these students are graduated or have left the schools to seek employment or because of age. At the prevocational level most schools for the deaf in the opinion of the discussants are doing a fairly acceptable job, often with limited facilities. The majority felt, however, that the vocational program in many schools was not adequate and in some cases vocational training was nonexistent. They felt schools for the deaf should concentrate on providing good academic programs and limit their vocational training programs to prevocational preparation.

The above point of view was disputed by representatives of two large residential schools for the deaf which possess elaborate facilities and equipment for vocational training. Their minority opinion was that residential schools for the deaf should not be limited to pure prevocational programs, and that certain schools for the deaf were able to prepare students for successful occupational placement upon graduation. The group recognized the exceptional circumstances surrounding these schools and their programs.

Many pupils in schools for the deaf, it was pointed out, lack the maturity necessary to profit properly from a program of vocational training; and also that some schools are trying to push students out before they are mature enough to handle employment. Regional, post-high school, technical or trade schools could be of great assistance in some of these cases. Many deaf students need a more mature type of environment, different from that which can be provided in a residential school serving a wide age range of pupils. One expression of opinion was that schools for the deaf should provide vocational training at the semiskilled level for the student of limited ability; intensive training could be given in service occupations; these schools should offer only prevocational training for the average or above average student, leaving terminal vocational training of a higher order to another facility or agency. The group felt that the term "prevocational" should include evaluation, and evaluation should include try-out units in various shops plus such standardized testing as possible to determine which vocations or trades should be considered for an individual at the vocational training level.

There was also the feeling that day schools and day classes for the deaf should develop adequate vocational training programs and counseling services for the average deaf pupil. The majority felt that only the exceptional individual is adequately served in public trade or technical high schools which are often utilized at present by the day schools and day classes for the deaf. One such school claims to open its doors to deaf students but only if they pass an entrance examination (which is not required of the hearing students enrolled). Opportunities in these facilities for the less capable deaf are almost nil.

Union representatives present in the group discussion stated that the unions would prefer to train workers for the various vocations themselves. This would imply that schools for the deaf could change their emphasis to academic preparation and could further limit the prevocational offerings now available. This viewpoint was contrary to that of the educators of the deaf who felt the deaf applicant needs additional skill and training by a trained teacher of the deaf to enable him to compete for positions with hearing applicants who can be trained more quickly and easily by union instructional procedures. It was further pointed out that few unions have training programs. Consequently this suggestion was rejected by the group.

Interim Responsibilities of Schools

The necessity to meet the needs of different ability groups among the deaf should be recognized and a school for the deaf program of academic strength plus prevocational evaluation followed by some type of technical training for the deaf following graduation would probably be the most logical solution; but, in the meantime, until this goal can be realized it is the duty of all schools to provide the best vocational training possible along with a strong academic program.

Attitudes

It was generally agreed by the discussants that the lack of work skills is not the major obstacle to successful employment of the deaf. The group felt that proper attitudes were not being developed. They pointed out that attitude development is hard to measure. Guidance and counseling is needed in this area and few are trained for this. The deaf need more instruction in the development of proper attitudes, work habits, "How to get along with the boss," "How to get along with fellow workers;" in other words, "How to get along with the world about them"

"Occupational preparation" was suggested as a term which might adequately bridge the gap between the various phases of vocational training and which would include the academic aspects of preparation for employment. It could also include the preparation described by the terms "prevocational," "vocational," and "technical training."

Communication

There was general agreement among the discussants on the need for improved language ability, reading and writing skills, mathematics and spelling. Deficiencies in these areas prevent many deaf persons from coping satisfactorily with union and state board examinations, with application blanks, business forms--in all situations requiring sufficient language skill to fill out forms and questionnaires. The group felt every program of preparation for occupational placement should recognize the need for the deaf pupil or the deaf client to communicate freely and easily.

The Hard Core Deaf

The discussants recognized the particular needs of the group referred to as the "hard core" deaf. This is the group with limited language and communication ability, often of borderline intelligence, and generally unable to cope with the modern technical advances. Many are probably destined for permanent sheltered workshop situations. DVR representatives suggested that the schools for the deaf need to provide more training for this group. The school for the deaf representatives agreed that they should do more with the hard core group, but time, money and the needs of other pupils have prevented this.

Members of the group pointed out that there are currently in effect several federal laws and acts making funds available on a matching basis for centers and/or personnel training to meet the needs of the hard core groups. States, however, are not making use of these funds.

Adult Programs

Experience has shown that deaf adults of various levels of ability are motivated to participate in programs of adult education designed for them. Enrollment has been surprisingly good in the few programs which have been available. Courses offered to meet demand have included English for deaf persons of varying language abilities, mathematics, business practices, and tax form instruction, to name but a few. In programs offering instruction in the more traditional vocational subjects, deaf adults possessing a wide range of abilities have taken training in areas ranging from service occupations such as janitor and building custodian to offset lithography and linotype operation. More programs of the kind outlined above should be available for the deaf adult, it was felt, and that educational opportunities open to hearing adults should be available to the deaf adult.

Evaluation and Assessment

There is a general need for more adequate evaluation materials and procedures. Standardized tests now available are often neither effective nor reliable with the deaf. Tests should be designed to determine where the deaf can excel, and job potentials for the deaf need to be determined so that training can be designed for these areas. Programs of vocational training would be able to operate with much greater efficiency if pupils or clients could be evaluated more accurately to determine where their strength and weakness lie. The discussants felt research is needed to assist in the development of adequate evaluation tests and techniques.

Flexibility - Adaptability

Provisions to meet the needs resulting from individual differences should be much stronger in many existing programs it was agreed. There is generally not enough range in choice of vocational offerings nor in the level of training offered. The needs of a great many deaf people are not being met. In some places the needs of the average group are met rather well, in others the below average group are prepared for employment within their range of ability.

The lack of vocational training programs to challenge the abilities of the above-average deaf person results in a waste of human resources and relegates many deaf persons to employment in occupations in which they have feelings of frustration and boredom. Vocational training programs should give adequate attention to individuality. An adequate program of occupational preparation must keep in mind each individual's need for both the academic and the vocational aspects of training. Only with this type of preparation will the capacity for adaptability be developed.

There should be ever present a recognition of the need for the deaf to be adaptable in order to meet the problems of anticipated technological changes and the possibility of resultant unemployment. It should also be remembered that the older deaf employees in areas of work affected by automation or other technological changes will sometimes need assistance in catching up with these changes. Their needs may be for assistance in learning new technical terms. There may be the need to learn the operation of up-dated equipment or to learn radical changes in the industrial processess. All of these possibilities require adaptability and flexibility in the individual.

Personnel Needs

There are highly successful and beneficial vocational programs serving the deaf. The better ones often result from the cooperative efforts of rehabilitation agencies and schools for the deaf. Still, the discussants felt that there is a great need for trained personnel to work in programs of vocational training with the deaf. Personnel skilled in evaluation techniques, counseling, occupational preparation, placement and follow-up are in great demand. Many schools for the deaf and other facilities for vocational instruction lack guidance directors and vocationally oriented counseling services. In some areas these services are almost nonexistent within an entire state. Each state and each school for the deaf should have a properly trained, full-time person for counseling, placement and follow-up services with the deaf.

The entire group felt that adequate training for such personnel was of prime importance. They strongly recommended that more training centers for Vocational Rehabilitation counselors and for guidance and counseling directors be established comparable to present teacher training centers. These centers should orient the trainees to the needs and problems of the deaf and should provide them with training and practice in all types of communication skills with the deaf. The trainees should have an opportunity for practice counseling with the deaf comparable to the observation and practice teaching requirements for those preparing to be teachers of the deaf. Such practice counseling should be under the supervision of the training center. These centers should be established at Gallaudet College or at other centers having adequate staff and facilities.

Vocational Rehabilitation Administration should assist in the establishment of more centers with comprehensive programs for training personnel to work in vocational settings. The group felt that a trained vocational rehabilitation counselor should be available to work with each school for the deaf as a regular assignment. Full-time persons with adequate training should be available in every sizable program of vocational training. The National Defense Education Act and the 1963 Vocational Education Act can apparently provide personnel under certain conditions and should be utilized wherever possible.

Conclusion

Those dealing with the vocational programs for the deaf should be familiar with the proceedings of the 1959 Fort Monroe conference to develop guidelines for development of rehabilitation facilities for the deaf, and the conference in Delavan, Wisconsin, outlining further considerations in this field. The group felt there was need for a closer relationship between VRA and all programs of vocational training for the deaf. The cooperation of VRA and schools for the deaf and with other programs of vocational training or rehabilitation is vitally needed to upgrade the employment status of the deaf. The assistance of other groups such as the clergy, clubs for the deaf, and guidance groups should be sought in this endeavor.

Community industrial facilities should be utilized by more programs for on-the-job work experiences and for advanced on-the-job training with pay by the employing agency. VRA assistance may be necessary in many of these programs.

It was recommended that there be a coordinated state, regional and national effort to provide job information, current employment status, and data on the potential employability of the deaf. This would enable training facilities to constantly evaluate their programs in the light of current needs and would enable them to add or drop courses as indicated by the existing employment situation.

Chapter Two

Topic II: Needed Expansion of Vocational Training Programs

Topic Chairman	Kenneth R. Mangan
Topic Editor	Hugo F. Schunhoff
Topic Recorders	Sam B. Craig Lloyd A. Harrison Audrey C. Hicks George G. McFaden

SUMMARY

Workshop participants, it was observed, appeared to regard Topic II as that one of the four major topics which was freighted with the greatest long-range implications for improvement in the status of the deaf as self-sufficient citizens.

A combination of one national vocational-technical school for the deaf with regional vocational schools, perhaps four in number, appeared to attract the support of the greatest number of Workshop participants in their efforts to pinpoint a solution to the critical need for improved vocational opportunities for the deaf. Considered separately, the proposal of a single national vocational-technical school had its adherents, as did the concept of regional schools. Both proposals received strong support with the regional school proponents appearing to be more favorable. Those who gave stronger support to the proposal of a national vocational-technical school were cognizant of the very specific area of need for technical training programs not offered in the one national college for the deaf. In this respect the national technical school would bear resemblance to Gallaudet College, the single national liberal arts college for the deaf. Since the number of deaf students qualifying for vocational training rather than technical training would be considerably greater, it was deemed feasible to establish regional vocational schools located strategically around the country to serve the greatest concentrations of families with deaf children.

In discussions on Topic II as in the other topic groups, heavy emphasis was laid on the requirement that instructors must possess skill in communicating with the deaf and a thorough understanding of the problems inherent in deafness. Ineffective communication and lack of adequate understanding comprise two deterrents which school administrators are constantly seeking to remove.

Generally, it was felt that schools for the deaf as presently constituted should concentrate on prevocational training. There is a small minority of schools in which the vocational programs are reported to be successful. Obviously these programs should not be disturbed; nor should present inadequate vocational programs in other schools be abandoned.

In view of the unanimity expressed concerning urgent need for action in expansion and improvement of the vocational training program, but conscious of sincerely divergent opinions as to the one best plan to implement the expansion, the conference made a strong recommendation that a representative national committee be established to study ways of improving existing programs and of establishing such new programs and facilities as may be required to meet the varied needs of all of the deaf.

PREFACE

The Need: There was agreement that a crucial need for expansion of vocational programs for the deaf does exist. The discussants, therefore, proceeded with the consideration of appropriate, feasible, and effective means of providing such expansion.

Preliminary Considerations: It was agreed by the discussants of Topic II that vocational-technical programs under consideration are concerned with those students who are of suitable age and maturity to profit from such specific vocational or technical curricula as may be appropriate for effective vocational preparation and that more specific requirements for admission should not become a part of this discussion.

One group proposed that the original topic be expanded to read "Needed Development and Expansion of Vocational Training Programs." Another group defined the term "expansion" to mean extension and/or modification of training programs and allied services in all directions.

It was further noted that a broad range of opportunities for vocational training must be made available in order to meet the requirements of the deaf students whose needs vary greatly, including the needs of the deaf slow learner, the multiply handicapped, the worker displaced by automation. These needs pose two problems: concentration of numbers and variety of programming.

I. Proposed types of facilities and area of coverage: Several proposed types of facilities and varied proposals for area coverage were considered by the discussants of each group.

A. One national technical or vocational-technical school for the deaf:

One of the four groups was generally agreed that one national technical institute for qualified deaf should be established. This group further suggested that the planning of a national technical institute should embrace the concept that such an institution should be accredited at the junior college level and that it should also provide post-secondary school academic courses for qualified deaf students who are not interested in or capable of following the liberal arts program offered by the existing college for the deaf.

A second group reached no consensus but agreed that factors favoring a national technical school include the following:

1. It would provide technical training for the more able deaf individuals who are not now being offered technical education.
2. The enrollment would be large enough to justify a broad program.
3. Such a school could be used as a training center for vocational teachers of the deaf.

The same group noted that the curricula might be too difficult for many of the prospective students and the student body, therefore, might be very limited.

Further consideration and strong support of a national technical facility will be noted in a combination proposal of a national technical school for the deaf and regional vocational schools in Item C below.

B. Several regional vocational-technical schools for the deaf:

One group strongly supported a recommendation for regional vocational-technical schools for the deaf. Suggested guidelines for centers of this type include the following specifics:

1. Such schools should be located in industrial areas.
2. Such schools should be connected with or located near a large college or university with professional staff and facilities for research in vocational-technical training areas as these curricular areas relate to deaf people.
3. It would be possible to establish a special program in connection with these regional facilities for the purpose of training vocational-technical teachers, vocational counselors, and other necessary personnel to work effectively with the deaf client.
4. The program should include supervised work experience, on-the-job training, placement service and follow-up for deaf clients being trained.
5. All members of this group but one felt that the regional vocational schools should be for deaf students only.

In a second group, considerable support was given to the plan of having several regional vocational schools, three or four, located in sections of the United States where there is greatest need.

This group suggested that

1. The level of work in a regional school would in some instances bridge the gap between existing programs and a higher technical school.

2. A regional facility would offer some advantages in being reasonably near the homes of a sizeable number of the deaf students to be enrolled.

Other suggestions from the group included the following:

1. Consideration might be given to a combination of vocational and technical schools.

2. Consideration might be given to a dual plan with one kind of program for the highly populated, industrial areas and a national school to serve those not residing in this type of area and for all who preferred it.

In a third group there was considerable support for regional schools.

In the fourth group there was minority support as reported in Item C below.

C. A combination national technical school and several regional vocational schools:

One group, having reported support of both a national technical school and several regional vocational schools as reported under Items A and B above, reaffirmed its support of a combination plan providing the establishment of both the national and regional facilities.

A second group reported unanimous support of a combination of one national technical school and four vocational schools if there would be no restrictions with regard to type of disabilities served in such facilities. However, if such facilities were to be limited to serving only deaf clients, a minority of this group was opposed or undecided. Those not favoring such facilities when restricted to deaf individuals voiced the following concerns and suggestions:

1. Separate facilities for deaf persons constitute an ideal situation, but such provisions might be opposed by other disability groups.

2. One must be practical when considering national and regional schools. Possible benefits under the provisions already made by the 1963 Vocational Education Act should not be overlooked. One of the regional schools provided for in this act might be designated a facility for deaf students as a pilot program.

3. Better use might be made of facilities which serve clientele of various types of disabilities before establishing separate ones for deaf people. It was suggested that this may be practical from the cost standpoint.

A third group reached no agreement on either a national technical school or regional schools, but a minority of five individuals in the group expressed strong support of the proposal to establish both a national technical school and regional schools.

Recapitulation of Items A, B, and C

One group expressed support of both a national technical institute, regional vocational schools and in like manner a combination plan. A second group supported unanimously the proposed establishment of one national technical school and four regional vocational schools if such facilities would not be restricted to the deaf. A third group considered both the strengths and weaknesses of a national school and reached no agreement, but at the same time gave considerable support to the proposal for establishing regional schools. The fourth group could reach no agreement but a minority of that group gives strong support to establishment of a combination of both types of facilities.

One group proposed the possibility of developing several of the existing schools for the deaf into regional centers. Some individuals in the group believed that this was not feasible because of the broad range of programs and services needed and because of social factors involved in having adults on the same campus with young children.

D. The possible use of existing vocational-technical schools, using interpreters, note-takers, counselors, and other supporting personnel:

One group reported a consensus on the proposal to encourage better use of existing vocational and technical schools by making use of interpreters, note-takers, counselors, and other supporting measures which might enable the deaf to take advantage of services available through these facilities. This was considered to be especially appropriate to meet a part of the total need as time will be required to get new facilities established and in operation.

A second group reported that the idea of using vocational-technical schools with interpreters, note-takers, counselors, and other supporting personnel did not appeal to many of the discussants. In this case and with similar plans, it was pointed out that

1. Good interpreters are difficult to find.

2. Interpreting does not always succeed in giving the student the full and exact meaning intended by the teacher.

3. The language problem of the deaf is not always understood by interpreters.

4. Note-takers vary in quality and organization of notes; therefore, the student is apt to suffer.

It was agreed that this plan needed further study and perhaps better financing if it is to be expanded.

A third group reported a minority of two individuals supporting this method of expanding services. The fourth group reported no discussion.

E. A comprehensive facility related in some manner to an existing university located in an industrial, urban area--such facility to include vocational training, technical training, remedial training, cooperative work experience, diagnostic and guidance services, vocational teacher preparation, vocational counselor preparation, adult education programs, and research in the vocational education of the deaf:

Two groups reacted to this proposal in some manner. One group strongly recommended that each regional vocational-technical school established be a comprehensive facility. A second group gave strong support to a comprehensive facility related in some manner to a university located in an industrial, urban area, but held that the facility should retain its identity and function as an autonomous unit. The second group further stated:

1. This type of facility could offer adult education, job retraining, and other related services.

2. This type of facility could offer flexible programs, would bring the deaf in contact with hearing students, and would offer the status of being affiliated with a university.

3. Financing might be easier for such a facility than for certain other plans.

4. The possibility that the deaf might oppose being integrated with the hearing was suggested.

5. The use of interpreters was questioned.

One discussant who gave strong support to the concept of such a comprehensive facility described his concept of such a proposal with the following details:

In view of the problem of providing adequate opportunities for deaf people to prepare for and make satisfying adjustments to the changing world of work, there should be established a comprehensive, multipurpose vocational and technical institute for the deaf. A residence institute is proposed. The following functions are suggested:

1. Offer an extensive array of vocational and technical programs in response to the wide range of aptitudes, interests, previous educational attainments, and realistic occupational aspirations of deaf youth and adults.

2. Provide a comprehensive program of vocational counseling, basic educational remediation, occupational training and retraining, placement and follow-up, school-job coordination and other ancillary services required to ensure adequate occupational preparation and adjustment.

3. Serve as a major laboratory for research with reference to the many problems of occupational preparation and adjustment of deaf individuals.

4. Develop curricula, instructional media and teaching methods required to improve occupational training programs for deaf students in other schools throughout the country.

5. Provide realistic laboratory experience as an integral phase of the preparation of vocational teachers, administrators, counselors, rehabilitation specialists and other professional personnel required to staff vocational departments of schools for the deaf.

The unique functions of the institute envisaged here strongly suggest that it be attached to a major university which meets the following criteria:

1. Located within or near a major labor market area.

2. Having outstanding research and instructional programs in such fields as: special education, speech and audiology, medical and health sciences, vocational and technical education, sociology, psychology, social work, labor and industrial relations and rehabilitation counseling.

3. Possessing a long history of cooperative working relationships with various agencies whose services will be essential to successful pursuit of the functions of the proposed institute.

4. Expressing interest in making a long-range commitment to the development and support of a comprehensive institute along the lines suggested herein.

II. Additional and varied considerations.

A. Inclusion of sheltered workshops for the multiply handicapped deaf individuals (terminal and/or evaluational) in the total facilities provided:

Two groups reported discussion of this topic and indicated consensus that sheltered workshops be included in our total vocational planning for the deaf, either separately or as a part of more comprehensive facilities, to provide for the needs of multiply-handicapped deaf and for those who for any reason cannot compete for employment under normal conditions.

The consensus of a third group was that the concept of sheltered workshops implies a low-level, terminal type of placement especially designed for trainable but not ordinarily educable youngsters and adults. They felt that the function of sheltered workshops should be deleted from possible inclusion in a regional vocational program.

B. Inclusion of regional vocational counseling centers as a part of our considerations:

Two groups reacted to this topic and reported consensus that vocational counseling and guidance should be an integral part of all levels of education for the deaf. This includes academic school programs as well as vocational and technical schools. Counseling and guidance should be considered a specialized service and made available through well-trained staff members.

C. Inclusion of adult education programs as a part of the total facilities to be provided:

Three groups reported deliberation on this topic, all having consensus in favor, with certain considerations:

1. Adult education programs are feasible in densely populated communities.
2. Adult education programs should include both short-time courses and courses of such duration as may be needed by deaf individuals who have been displaced by automation.
3. More emphasis should be placed on the local level to fully utilize technical skills and services available through existent facilities.

D. Inclusion of on-the-job training as a facet of whatever type of program is provided:

This topic was considered by three groups, all in favor of on-the-job training, with the following supporting details:

1. On-the-job training should be carried out primarily on a local level.
2. On-the-job training should not be confused with work experience where related studies are a part of the training program.
3. On-the-job training is advantageous for those who cannot for various reasons take advantage of or profit from other types of training.

III. Indicated changes in our existing programs.

A. Should the subsequent expansion of vocational facilities indicate appropriate changes in educational programs as currently constituted for deaf youngsters 18 years of age and below? If so, what should these changes be?

There was consensus in three groups that we should not dispose of our current prevocational and vocational programs. It was suggested, however, that the emphasis should be changed. We should then concentrate our efforts on prevocational types of programs and give more effort to improved language skills and the enrichment of the academic offerings. It was further suggested that prevocational programs should not be considered as distinct from academic programs, but should be incorporated in the overall curriculum for the development of the whole child and be closely interrelated. Changes would involve a redistribution of time as well as qualitative adjustments in existing curricula.

It was also pointed out that officials of our school programs will need to know more about vocational-technical programs in order to give better direction to the kinds of revision which has been suggested above. The administrator will need an understanding of vocational-technical curricula to work in a professional relationship with the officials of the vocational-technical facilities which have been proposed.

B. Will such changes affect the holding power of our schools?

Groups reacting to this topic felt that the holding power of our schools would not be impaired, and in some cases might be enhanced.

In conclusion, a plurality of workshop participants appeared to support the concept of a combination of one national vocational-technical school for the deaf with regional vocational schools. Adherents of a single national vocational-technical school alone seemed slightly fewer than those who felt that regional vocational schools would be sufficient. Further, on this most important aspect of expansion of vocational training programs, the Workshop made a strong recommendation that a representative national committee be established to study existing programs and devise new programs and facilities to meet the varied vocational needs of all deaf people.

Chapter Three

Topic III: Recruitment and Preparation of Staff

Topic Chairman	Edward W. Tillinghast
Topic Editor	Howard M. Quigley
Topic Recorders	William J. Holloway John G. Nace Gwenyth R. Vaughn William E. Woodrick

SUMMARY

The perennial problem of administrators of schools for the deaf--where to find adequate staff personnel, and how to get qualified prospects to join the staff--was approached variously by the four groups which addressed themselves to Topic III. From their deliberations eight specific suggestions met with sufficiently widespread support as to represent a consensus.

Recruitment

Recommendations for recruitment ranged from the employment of the successful retired deaf as instructors, to the obvious, but not easy, expedient of offering salaries that would attract the best qualified vocational instructors.

In-Service Training

Judged of equal importance with recruitment of new staff was the upgrading of present staff. It was felt that much could be done in bringing present vocational teachers up to date, thus making their teaching more effective and, to a limited degree, enabling them to handle more deaf students.

Communication With Students

The crucial matter of communication was stressed in all groups, and with reference to present teachers as well as recruits. Communication was held to mean more than just the mechanics of facility with words or symbols; the term was used in its widest sense of orientation to the problems of deaf people: an empathy with their unique situation and all its implications.

Interrelationships

Essential to bringing about more successful recruitment and upgrading of vocational staff workers for the deaf were improved relationships between several disciplines and between educational facilities and labor, business and industry. Most traditional programs for the vocational education of the deaf need re-evaluation, with consideration being given to a variety of related services such as those in the medical and paramedical fields.

Information Exchange

Without minimizing the difficulty facing all professions in keeping up to date in a world which alters almost overnight, it was held vital that administrators as well as staff members keep in touch with changes in the job market and with the special problems which these changes create for the deaf. Frequent and frank discussions with employers, prospective employers and employment agencies were urged, as were also the study of surveys, trade journals and publications of industrial firms. Corollary to the twin problems of recruitment and preparation of staff was the conviction that the potential abilities and skills of deaf people must be made more widely known through various media to employers, since employment must be the goal of any training endeavor.

* * *

Introduction

The Need: It is recognized by administrators that there is a shortage of qualified vocational teachers of the deaf, especially in schools that work with secondary school age students. Formalized preparation programs such as there are for academic teachers of the deaf do not exist for vocational teachers. The need for close relationships with the trades, business, and industry imposes a requirement for the overall competency of a vocational teacher that is frequently difficult to achieve.

The Problem: The revolution that is occurring in our society which affects the future employment of large numbers of our deaf youth and adults demands that present-day training of the deaf be re-evaluated, and ways found to recruit and better prepare the staff which bears the responsibility.

Definition of Staff: Group D suggested the following as a partial list of those comprising staff for the purposes of this report:

- Administrators
- Vocational Instructors
- Counselors
- Psychologists
- Dormitory Counselors
- Coaches
- Recreational Directors
- Health Services Personnel
- Social Workers
- Academic Instructors
- Audiologists
- Speech Pathologists
- Placement Officers
- Service Personnel
- Supportive Agency Personnel

I. Upgrading the qualifications of existing vocational teachers.

A. Upgrading was defined by one group as meaning both bringing up to date the present services and adding new developments. This means that the staff must be prepared to meet industrial changes. Desirable competencies for a vocational teacher were described by this group as, first of all, knowing his job and second, knowing his pupils. Specifically, these involve

--skill in the vocational specialty
--skill in presenting the material
--knowledge of the general principles of the specialty
--knowledge of the methods for teaching the deaf
--knowledge of related academic subjects

The same group could not arrive at a consensus as to whether it is better to develop a teacher from a skilled industrial worker or to train a teacher of the deaf into his favorite vocational area.

B. The problems of staffing for deaf students are similar to those for hearing students. Communication with and understanding of deaf people are the most serious differences There was consensus in all groups discussing Topic III that provision must be made for better communication, whether through writing, speech, finger spelling or signs, and that staff members should have training in understanding deaf people, especially those deaf persons who have difficulty expressing themselves. In every group discussion time was devoted to the general topic referred to as "implications of deafness." This reflected a concern that too many workers with deaf individuals have only a superficial knowledge of communication with the deaf (often only one way, in that the worker does not "read" what the deaf person says), and workers have insufficient understanding of the social and language problems resulting from deafness.

C. Cognizance must be taken of the tremendous explosion of knowledge in all fields, thus complicating the problems of teachers keeping abreast of new developments. It is of vital importance for administrators and staff members working with deaf persons to keep in touch with changes in the job market through surveys, talking with employers and prospective employers, reading trade journals and publications from industrial firms, and employment office publications.

D. Improvement of vocational teacher qualifications should be individualized in terms of specific needs of the teacher in the following areas: skills, related information, teaching techniques, knowledge of pupils engaged in the training process, and implications of deafness.

E. Discussion groups for Topic III developed a number of suggestions to help vocational teachers keep up to date:

1. Use of advisory committees from business, labor and industry. Three discussants placed considerable emphasis upon this point. They indicated, however, that it is practical to set up such advisory groups only in large urban centers. Further, it is desirable to meet often enough to insure continuity from one meeting to the next. One group offered the following suggestions on this point:

    a. Arrange for industrial leaders to serve on school governing boards.

    b. Arrange for selected industrial, business and trade representatives to serve as advisors for planning and evaluating programs in trade and industrial schools.

    c. Encourage labor and management groups to assist in local areas to point out the needs in the labor market.

    d. Develop national surveys through avenues such as the American Vocational Association.

    e. Encourage industry and labor to contribute to the upgrading of vocational teachers by permitting them to enroll in the various training and refresher courses conducted by these organizations. This would provide vocational teachers with first-hand knowledge of current manufacturing processes.

Programs including labor, business, and management have been conducted in a variety of forms by those organizations represented in one group. Both banquets and one-day workshops seem to have been successful in enlisting the interest of groups and institutions. It is suggested that national, state, and local associations of the deaf may organize programs or meetings in which labor and management could be included so that they become better acquainted with the abilities of the deaf adult. In some areas parent organizations have been instrumental in securing labor-management interest.

2. The periodic return of teachers to trade practice to keep up with current developments.

3. Study in university programs planned in connection with industry. Examples of this would be the short course, or continuation center programs in universities.

4. Special college or university programs such as the institutes financed by the National Defense Education Act.

5. Special training programs for vocational teachers sponsored by business, industry, and labor.

6. Use of scholarships for preparation in fields of vocational activity.

7. Use of other agencies in the development of training programs and in placement and follow-up activities, such as a cooperative involvement of the Vocational Rehabilitation Administration, employers, and schools.

8. Use of in-service training programs that are helpful to vocational teachers.

II. Orientation courses on deafness for people in related fields, such as vocational counseling, psychology, audiology.

A. While there was little time to discuss all the areas spelled out in this section, one group stated that orientation was necessary and valuable. There were comments, however, that some of the "short courses" were too short and did not allow enough time for sufficient orientation. The discussants felt that workers in related fields did not acquire enough sophistication in the areas of manual communication to prepare them for work with all types of deaf individuals.

B. The discussants recognized that other personnel, such as those in the paramedical fields, should receive orientation and have actual participation in programs involving deaf clients. Specialized personnel from the staff of one institution may be made available to other programs for orientation purposes. For example, staff members from a school for the deaf might cooperate with a nearby hospital or university in providing orientation services.

III. Subsidization of qualified vocational educators for programs to prepare them to work with deaf people.

A. Federal funds are available to help train qualified workers with the deaf people. Funds are also available under the 1963 Vocational Education Act to be used for research and development. These funds may be used for basic research, pilot programs, experimental programs and the like. Part of these funds are earmarked for ancillary services. A major emphasis in this bill and in the Economic Opportunity Act is the provision of funds for vocational education of disadvantaged groups.

B. Currently colleges and universities may submit proposals for the development of programs for preparing academic teachers of the deaf. Funds are available for major developments in the area, and initiative is needed to see that similar aid is secured to help meet the requirements in the field of vocational education.

C. Development of closer working relationships was urged between the various state boards of education and the schools for the deaf in the preparation of qualified workers, and in all other problems involved in working out good programs for vocational instruction. It was pointed out by several discussants in one group that the professional services available in the vocational education divisions of state departments of education are not fully taken advantage of because historically the schools for the deaf have tended to develop vocational programs independent of public school programs. There was consensus among the Topic III discussants that the staff in a school for the deaf should seek the services and guidance provided in state vocational education divisions as early as possible.

IV. Recruitment of staff.

A. Each group discussed ways and means for recruiting staff for vocational education. These are listed below as a summary of suggestions from all participants.

1. Recruiters should not overlook the source of vocational teachers in a number of deaf men, successful in their occupations or vocations, who, having reached a point in their lives when they feel they might want to leave business or industry, might very well accept a teaching position in a school for the deaf, and because of their background of training and experience do a commendable job.

2. Steps should be taken to improve the image of the schools for the deaf in order to develop a more favorable climate for the recruitment process. Aid can be secured from ministers who serve deaf people, advisory committees, chambers of commerce and other friends of schools for the deaf. Improvement of the image of a school is difficult, and it must be carried out through a period of years.

3. A state organization composed of representatives of agencies and persons working in education of the deaf could be formed to help develop a higher quality of relationships between schools for the deaf and individuals and agencies in the community in order to help meet the demand for qualified vocational teachers.

4. Advertise for vocational teachers in professional and trade journals, through state employment agencies and in newspapers.

5. Give attention to future, as well as current, teaching needs through projections based on current trends.

6. Make teaching jobs more attractive by providing opportunities for continuous on-the-job growth.

7. Offer salaries comparable to prevailing wages in the trade to be taught.

8. Eliminate the bachelor of arts degree as a main requirement for vocational teachers, and place major emphasis upon knowledge of the trade, trade experience and union memberships.

V. Recommendations .

A. Communication: When courses are given anywhere for instruction in manual communication and orientation to work with deaf people, it was recommended that the instruction offered should include both of these to facilitate the ability of prospective vocational teachers to communicate meaningfully, both manually and psychologically, with deaf persons.

B. Public relations: It was recommended that appropriate personnel representing educational programs for the deaf develop on-going public relations to acquaint lay groups, the business community, and labor with the abilities and skills of deaf people. Public relations programs might include extensive use of the news media, seminars, workshops, demonstrations, and the like.

C. Research: It was recommended that there be research to develop new areas where the deaf can achieve, and then train teachers to teach in these areas.

D. Inventory: It was recommended that an individual inventory for schools presently in operation be made, both on a self-survey and on an independent basis, at which time the vocational programs would be analyzed, the needs examined, the staff evaluated, and the deficiencies determined. This evaluation would then be followed by making whatever corrections and adjustments were found necessary.

E. Assignment of counselors: It was recommended that state vocational rehabilitation agencies assign a counselor to a school or schools for the deaf and additional counselors for areas with a large community of deaf people. It was also urged that the vocational rehabilitation counselor for the deaf have supervisory status so that his influence could be useful to the field counselors.

F. Form a vocational education section: It was suggested that a more effective and vigorous vocational education organization be developed within the framework of the Convention of American Instructors of the Deaf, or within a similarly responsible group concerned with deaf people, or related professional organizations such as the American Vocational Association.

G. Compensation and insurance laws: It was recommended that a committee study industrial compensation and insurance laws, along with other areas needing investigation or promotion, for improvement and better public relationships. It was also felt that even though special education and supervisory persons and vocational rehabilitation counselors are not usually directly concerned with deafness, they will come in contact with the special problems of hearing-impaired people, and they should be aware of the application of these laws to them.

H. Orientation: It was strongly recommended that the colleges and universities offering degrees in special education and vocational rehabilitation counseling be requested to include in their courses of study a section concerned with orientation to deafness as outlined in Item I of this section.

I. Special training: It was recommended that the Workshop state that the vocational counseling of deaf people is such a highly specialized field that it requires specially trained counselors in the field of the hearing handicapped.

J. Laboratory schools: It was recommended that training programs for teachers of the deaf should make use of facilities for education of the deaf for laboratory experiences, but no facility should be so overburdened by the demands made upon it that the students are deprived of normal classroom instruction.

K. Federal aid: It was recommended that vocational teachers of the deaf be provided training along the same lines as is now done with academic teachers, namely with Federal scholarships.

L. A requirement for all states: It was recommended that in order for a national or regional vocational training facility to be effective, all states have specially trained vocational counselors for the deaf.

Chapter Four

Topic IV: Ancillary Services

Topic Chairman	Stanley D. Roth
Topic Editor	Merle B. Karnes
Topic Recorders	William D. Jackson Lang Russel Thomas G. Tyrrell McCay Vernon

SUMMARY

Good point could be made for many of the suggested actions which the Topic Committee listed under the heading of Ancillary Services. The chief task of the four discussion groups was to establish a focus on the services which spell greatest opportunity for vocational progress.

Advisory Board

Residential schools and day classes for the deaf were urged to set up advisory boards comprised of topflight men and women from labor, management and industry. The purpose of the advisory boards would be two-fold: one being to provide guidance and counseling. Secondly, board members would serve as a liaison between the training schools and business and industry. A valuable bonus provided by these members would be the dissemination of information about the vocational assets of deaf people and encouragement of their employment.

Information Center

A clearing house for the dissemination of information about the deaf was strongly advocated. Much information on the deaf which ideally should be given widest distribution--to the deaf themselves as well as to agencies, industries, and educators having an interest in or obligation to the deaf-- is presently scattered and not always available when most sorely needed. "Intensive study" of this problem was proposed by the conferees.

Similar coordination was strongly called for in gathering information on the existence of ancillary services at local, state and national levels in order that deaf people may realize maximum benefit from services presently available. It was agreed that much assistance now being offered is not being utilized because of inadequate communication between the various agencies on the one hand and, on the other, those deaf for whom the help is intended. Improved coordination should result in the development of new and more meaningful ancillary services.

Misconceptions about the deaf on the part of industry and labor annually exact a huge toll through unemployment and underemployment of the deaf. Opinion that employment of deaf personnel results in greater liability costs is not borne out, according to conferees. Studies must be conducted to obtain facts in this regard, and then educate industry and the large casualty insurance companies, accordingly.

Research

The need for more research relative to ancillary services was felt to be crucial. Results of such studies could serve as guides in the improvement of ancillary services. The subjects for valuable research were myriad, but studies to determine the effectiveness of schools for the deaf, of present vocational rehabilitation programs, and an evaluation of the occupational assets and limitations of deaf workers (including a true picture of their safety record), of the future trends in employment as they relate to training of deaf youth and retraining of adult deaf--these were advanced as among the most meaningful starting places for profitable research.

Thus, it was the consensus of the Workshop that the four groups in addressing themselves to Ancillary Services had achieved a most commendable distillation from the welter of material originally offered for discussion.

Definition

Ancillary services are those services needed by the deaf to insure their optimum vocational training, adjustment, realization, and satisfaction that are in addition to those provided in traditional programs for the deaf. The discussions in all four groups indicated that the unique needs and problems of the deaf require the attention and support of numerous agencies, organizations and groups with specialized staffs and facilities.

I. Ancillary Services Now Available That Could Be or Are Being Utilized to Promote Improved Vocational Training for the Deaf

The groups recognized that there are many ancillary services that either are not being used at all or are not being used fully to promote maximum vocational opportunities for the deaf. These services exist at the local, state, regional, and national levels and should be fully exploited and coordinated.

Local

There are some local school systems that have day classes for the deaf. In these schools are found social workers, nurses, guidance counselors, psychologists, prevocational counselors, and especially vocational counselors who assist special class teachers in gaining a better understanding of the strengths and weaknesses of each individual deaf youth. The latter aid in providing each with the experiences and training that will enable the deaf youth to develop the habits, attitudes, knowledge, and skills necessary to obtain and maintain a job and become a contributing member of society.

In the community there also exist ancillary services that are available to assist in the vocational training and adjustment of deaf persons. These may be offered by vocational rehabilitation offices, trade unions, local advisory boards from labor, management and industry, employment agencies, medical specialists, speech and hearing clinics, parent associations for the deaf, clergy, social welfare agencies, recreational workers, as well as professional organizations interested in promoting improved educational programs and services for deaf persons.

In large cities there usually are trade or vocational schools that may be open to deaf individuals. In addition, some local school systems provide adult education classes which may be appropriate for deaf adults.

State

Among those ancillary services at the state level that should be encouraged to assist in improving the vocational opportunities of the deaf are state employment agencies, the Division of Services for Crippled Children, the Division of Vocational Rehabilitation, the state associations for the deaf and hard of hearing, facilities and staffs of state colleges and universities as well as private institutions of higher learning, state advisory boards for promoting the employment of the deaf, departments of public instruction, the division of special education, and state schools for the deaf which may have many disciplines represented on their staffs.

National

At the national level there are many organizations interested in promoting the education, vocational adjustment, and general welfare of deaf persons. All national organizations vitally interested in the deaf should strengthen and coordinate their efforts to obtain improved ancillary services for such handicapped individuals. Various sections in the federal department of Health, Education, and Welfare provide services of an informational nature to professional personnel working with the deaf people. Funds are also available for conducting research and demonstration projects. Any sources for supporting funds should be called to the attention of those interested in investigating the various aspects of the problem of providing improved vocational opportunities for deaf people.

There are valuable ancillary tools that appear to have considerable worth in training programs for the deaf. One such tool is the instructional aid films being produced by Captioned Films. It is strongly urged that Captioned Films be encouraged to step up their schedule of study and development of curricular materials relative to the area of vocational education. Other visual aids appropriate for use with the deaf should also be explored. It was urged repeatedly by the participants of all four groups that all those persons working in the area of vocational training of the deaf seek out and use all existing ancillary services. One group advocated a central clearing house to sift and disseminate information regarding the development of new techniques and equipment. It was proposed that the Deaf American (Silent Worker) might devote a section of its publication for this purpose.

II. Ways of Improving and Utilizing Existing Ancillary Services

It was the consensus of all four groups that improvement of existing ancillary services and full utilization of these services can be facilitated by providing more adequate financial support which would enable agencies to increase their personnel, and work toward coordination of effort at all levels of operation. Just how this coordination can be achieved is a more complicated decision to make. It was felt by some that one of the existing agencies such as vocational rehabilitation agencies, a state school for the deaf, a state office, or a professional organization might be charged with the responsibility of coordinating efforts throughout the state. A similar approach might be considered locally and nationally. Another suggestion was that of organizing a coordinating commission at each of the various levels of operation--local, state, and national. One group pointed out that good coordination would guard against unnecessary duplication of services.

In most large metropolitan centers there has been considerable interest in developing a comprehensive facility where all ancillary services would be available; such plans have failed to materialize with a few exceptions. Discussion in all four groups centered on ways and means by which financial support can be obtained to provide improved ancillary services. One suggestion offered in one of the groups was that at the local level a mayor's committee or representatives from labor, management, industry, boards of education, and other community groups can be very effective in obtaining the understanding of the need for ancillary services to the deaf and in obtaining the necessary funds. Financial support from interested civic groups was cited as resources to draw upon. At the state level, the assistance of the governor's office through campaigns and other contacts with responsible people was deemed essential.

Lack of knowledge among the deaf of the ancillary services available to them was cited as a crucial problem by one of the groups. It was felt that such agencies have a responsibility for reaching out and making their services known.

Some specific ways of improving ancillary services for the deaf and/or making better use of such services were suggested as follows:

1. Publication of a directory of agencies and services (local, state, and national) which have something to offer the deaf, particularly as these pertain to vocational preparation.

2. Improvement of the in-service training programs within schools for the deaf, Division of Vocational Rehabilitation and other related groups. Consideration should also be given to cooperative in-service meetings of various agencies.

3. Improvements in the dissemination of information about deaf people and their vocational assets are needed. This could be achieved through more intensive use of television, films used by lay groups (particularly prospective employers), radio programs, and articles in newspapers and professional and popular magazines. One group suggested that a select group travel about the states dispensing information about new advancements and opportunities for the deaf in ancillary areas. The group also interpret new federal laws as they apply to deaf persons.

4. Inclusion of presentations by agency personnel on programs of state associations of the deaf giving the agency staff an opportunity to interpret their functions as they relate to deaf people.

5. Encouragement of universities and colleges to develop a curriculum--for training professional staff--that cuts across various fields or disciplines. As example, a rehabilitation counselor would be more effective if he had some formal training in general education and vocational education of the deaf.

6. Establishment of a central clearing house to sift and disseminate information regarding newly developed techniques and equipment for use with the deaf. Such a section might be included in a publication of one of the deaf associations of the deaf.

7. Promotion of adult education programs designed specifically to enhance the vocational opportunities for deaf individuals.

8. Reduction in the case load of rehabilitation counselors of the deaf was specifically urged by one group. While the precise maximum case load has not been determined, it was felt that the case load of DVR counselors having deaf clients should be lower than the general counselor's case load. Admittedly, more DVR counselors should be added to the staff as funds permit.

9. More emphasis should be placed on the mental health of the deaf utilizing all available resources. Since it is known that jobs are lost frequently because of poor personal adjustment rather than lack of skill, the importance of good social and emotional adjustment of the deaf individual should be emphasized.

10. Better use of parent associations for the promotion of improved ancillary services to the deaf should be encouraged. Properly organized parent groups can be very instrumental in encouraging legislators to pass laws needed to create or improve ancillary services for deaf individuals. Such parent organizations can also elicit the support of local service organizations to donate funds. They can urge school boards to expand their staffs to include more supportive or ancillary services for deaf persons.

III. Development of Needed Ancillary Services at All Levels

Much group discussion centered around the development of needed ancillary services to promote the vocational training and adjustment of the deaf, and numerous suggestions were made. Among those ideas which attracted widest support were the following:

1. The appointment of an advisory board or committee with representatives from management, labor, and industry as well as professional personnel and community leaders, could provide guidance for schools for the deaf or day classes for the deaf. The purpose would be to improve existing ancillary services and develop new services as the needs dictate. This plan might also operate effectively at the state and national levels.

2. Professional organizations of the deaf should consider displaying at their conventions materials from industry which point up trends and/or requirements for job opportunities in industry. This information should be passed on to the deaf students and to their parents.

3. Vocational teachers and coordinators should be encouraged to obtain literature, films, and film strips from industries outlining requirements for employment. This information should be incorporated into the curricular offerings.

4. Definite effort should be made at all levels to promote improved public relations by developing plans by which the vocational assets and needs of deaf people can continually be brought to the attention of prospective employers.

5. One group especially discussed the needs for creative planning on the part of personnel working with the deaf. It was felt that existing agencies could be more effective if they could be more imaginative in their approach to helping deaf people become better prepared to compete in the world of work.

IV. Review of the Federal Laws that Provide Appropriations Which Can Be Utilized to Finance Research and Improved Services for Deaf People; Need for Additional Legislation

In the last few years funds have been appropriated at the federal level which have implications for research and demonstration and for the extension and improvement of services. Among these are funds that provide stipends to meet the increasing demands for professional personnel in leadership and direct-service roles. These include such laws as the Vocational Rehabilitation Act, the National Defense Education Act, the Area Redevelopment Act of 1961, the Welfare Amendment of 1962, the Manpower Training and Development Act of 1962, the Special Education Laws of 1963, and the Vocational Education Act of 1963. There are numerous other federal sources of financial help which should be explored to determine the specific requirements for eligibility to obtain funds for the deaf population.

It was suggested that the term of schools for the deaf be extended beyond the usual nine months. Legislation is necessary to provide funds for staff required by an extended school year. Vocational experiences for older deaf youths could be a vital part of the summer program for the deaf.

There appears to be a marked lack of knowledge as to the availability of funds under existing legislation. Here again the need to have such information widely dispersed among educators of the deaf is of prime importance.

V. Elimination or Modification of Procedures, Rules, Regulations and Examinations which Discriminate Unfairly Against Deaf People

Federal Civil Service procedures are reportedly under study with the purpose of eliminating practices that may discriminate against such groups as those who are deaf. Similar studies should be conducted at the state level.

Another recommendation is that a representative committee might be appointed to work with civil service commissions on setting standards for entry examinations. Deaf individuals are particularly interested in employment in governmental and public work. These outlets offer rewarding employment opportunities to which they are entitled. This type of employment also usually offers security factors and promotional opportunities superior to those found in private industry.

One group discussed procedures, rules, regulations and other examinations that discriminate against the deaf drivers in relation to driver training, licensing and insurance coverage. The question of providing interpreters or other assistance for the deaf was recognized as a major problem. It was felt that consideration should be given to establishment of a secondary disability fund which would free employers of responsibility in the event a deaf worker is 100 per cent disabled as a result of injuries received on the job. Fear of an increased accident rate appears to be a major deterrent to increased employment of deaf persons in industry.

Situations which seem to constitute unfair employment practices should be brought to the attention of the proper people, it was agreed, and this action must come from the grass roots. The most appropriate groups to call attention to these practices could well be organizations of the deaf.

Concern was expressed about employment opportunities being closed to deaf people by employment regulations. Cited were examples of large firms representing major manufacturing which impose restrictive hiring clauses closing their doors to deaf workers while competing firms welcome deaf employees in parallel work environments. It was pointed out that experience reveals certain fields of employment as being congenial to deafness and that there seems to be a paucity of information indicating the vocational possibilities and the vocational assets of deaf persons.

VI. Problems Related to the Vocational Training, Needs, Abilities, and Adjustment of the Deaf That Should be Pursued Through Research

Many unsolved problems and unanswered questions concerning vocational training of deaf individuals were mentioned. The following represent some problems that should be studied on a research basis.

1. An investigation of the vocational needs and abilities.

2. Construction of standardized basic aptitude, social adjustment, vocational aptitude and personality tests specifically designed for use with deaf individuals. With few exceptions, the current instruments used with them have been standardized on the normal.

3. Investigation of the current trends, needs, and demands in the world of work relative to deafness.

4. An investigation of prevocational training that employers desire for each of the various occupational skills.

5. A comparative study of deaf persons trained in integrated programs with hearing people and those trained in facilities for deaf people only.

6. Investigation of current facilities available for the vocational education of the deaf.

7. A study of the effectiveness of counselors of the deaf as a function of their training.

8. Delineation of strengths, weaknesses and needs in existing vocational programs throughout the country.

9. Investigation of the educational lag among deaf children and the implications for future programs.

10. A study to determine the range of abilities necessary for successful performance in various occupational areas.

11. A study to determine which occupations deaf people can perform adequately or above average because of their unique abilities.

12. The effectiveness of teaching machines in the instruction of deaf children and adults.

13. Research on improving telephonic communication equipment for deaf people.

14. Employer and union attitudes toward deafness as an employment hurdle.

15. Determination of occupations in which deafness is an asset.

It was recommended that staff members with research competencies be utilized at the local level to conduct studies on practical and crucial problems. College and university researchers should be encouraged to investigate some of the above problems and should particularly be encouraged to do the basic research in this field.

VII. Improved Dissemination of Information Pertaining to the Vocational Training and Adjustment of the Deaf

Dissemination of information seems to be a critical problem in improving, utilizing and developing ancillary services for the deaf. Some suggestions to alleviate or reduce this problem are as follows:

1. Urge research fund granting agencies to finance the publication and dissemination of research reports.

2. Promote federally supported workshops for practitioners to develop their competencies as consumers of research by disseminating research findings on deafness and particularly pointing up the implication of the research findings for improving the vocational training of the deaf.

3. Request that Captioned Films help publicize research findings and other pertinent data related to deafness and the vocational training of the deaf.

4. Encourage university staff members in deaf education or a professional organization to investigate the possibility of obtaining a grant to prepare an up-to-date annotated report on research pertaining to the psychological, educational and vocational aspects of the deaf.

5. Recommend that dsh (deafness, speech, hearing) Abstracts in addition to publishing annotated published research also include annotated reports on unpublished masters' theses, doctoral dissertations, and research in process.

6. Urge the development of workshops involving employers, school personnel, and agencies working with deaf people for the purpose of improving the understanding of the vocational assets of the deaf.

7. Recommend that every school for the deaf have available to its students a directory of all ancillary services available in that community.

Information relative to the labor market and job openings could possibly be made available to the National Association of the Deaf and in turn could be relayed to state and local chapters. In this way job information could be disseminated nation wide among the deaf population.

Chapter Five

WORKSHOP SUMMARY

S. Richard Silverman, Director
Central Institute for the Deaf

It would be presumptuous of me to try to summarize all that has gone on here in the last few days because it would be unfair to the participants; it would have been impossible for me to listen in on all the sessions. I thought, however, that it might be useful for me to share with you a set of impressions that I suppose you would have had if you had had the privilege I had of roving about the sessions.

First of all, I was impressed by the mood and the atmosphere of the sessions. I noticed in the participants, and was encouraged to notice, that we had a conviction about points of view without hostility, we had enthusiasm without arrogance, we had advocacy without imposition, we had perplexity without discouragement, we had urgency without panic, and finally we had concern without hopelessness. This is one impression that I carry away with me, and I trust that the subsequent implementation of what has been suggested by the excellent reviewers will be characterized by these attitudes.

Definitions Not Clear

A second impression that I have is that the people in vocational education not related to the deaf share with us the same perplexities and the same concerns; and although it is not encouraging to know that someone else has the same problems, it gives one confidence to know that we have available to us the opportunity for conjoint efforts. We find, for example, that people in vocational education are just as bedeviled as we are for definitions--they are not clear--they are concerned with literacy, with motivation, and so on. Another impression that I have is that there are many promising programs now in existence, which range all the way from vigorous, flexible, well-staffed programs at schools for the deaf to such new ideas as reality training for deaf people. Another impression that I have: At the outset I noticed a kind of polarization of attitudes. On the one hand there is a group who feels that the solution to our problem is in separate facilities for the deaf, and on the other hand there are those concerned with the notion of integration, putting together in constructive ways the deaf with hearing people possessing other handicaps. I think we would be remiss, perhaps derelict, if we did not make use of these constructive forces and as the days wore on I saw a kind of creeping depolarization.

Deaf People Have Rich Heritage

To those who have not worked in the field of education of the deaf, I point out to you that there is a sense of deep pride in the noble heritage of more than a century of efforts on the behalf of deaf people. A sense of identification with constructive and forward-looking efforts is to me an essential ingredient that we must incorporate as we write our recipe. It is a subtle thing, but it is a very deep thing. On the other hand, we do have changes and opportunities. And I expect when all is said and done that we will need most the wisdom to make constructive use of that rich heritage that exists among deaf people themselves, among those who have worked with the deaf, and those whose help we seek. I believe it can be done.

I also note the constant comment on research; no one is against it, rather everyone is for it. If ever there was what we have called a "Motherhood" issue, it is that. But, I warn us that we must distinguish among the kinds of research that we do and that we are dealing with an exceedingly difficult set of problems. Now I am not talking of what we call status research, which, when the questions are set up, clerks can handle easily. What I am talking about is a probing of the forces that influence individuals in their choice of occupations, in their outlooks, and so on. And I am afraid we are going to have to depart from some of the designs we learned in graduate school and adopt some of the more sophisticated, riskier techniques. I think we get limited by designs. If you study the history of the kind of research that has won the Nobel prize, you will find that one started with an examination of phenomena without worry about how he got the information or at the moment how valid it was.

More Thoughtful Research Needed

One more thing I would mention about research is that a good deal of it is done by graduate students, and hence the research that is chosen is research that will yield the degree in a short time. This prevents us from validating over long periods of time the procedures we have established. We need to be concerned with attracting investigators who have the ability and commitment to give us the longitudinal continuity that I believe this field requires. We must create an intellectual climate that attracts the good mind to our problems because you will be in competition for these people with others who have access to the same Government funds to which you have access. Sometimes I think that we, with a sort of cavalier dismissal of intellect, have been hostile to the well-trained, inquiring mind.

I also will mention that in this illusive field of research, in a field where the variables are so difficult to control, we are going to have to act on evidence that isn't always incontrovertible and isn't always complete, nor will it always pass the test of cold and rigid scientific scrutiny. We have just got to make up our minds that we are not going to be able to research everything and that we will use such intelligence as we have to make our decisions on the evidence that we have.

I shall not review for you what has already been said except in a sense to leave it with you as you leave. That is, that essentially we have two situations to contend with. One situation is the changing world of work, pointed out to us in some of the plenary sessions, one of which acquainted us with the projection of the future and another which gave us a rather distressing picture, at least at the high school level, of the employment situation of those who left high school and those who had only a high school education. The second situation, which compounds our complexity, is the problems faced by deaf people; and this situation comprises six facts that we need to get across to the others...first, communication; second, the gap between what our schools have done and the requirements of the world of work (That gap is generally thought of in the amound of gap, but we also have to get across to the world of work the kind of gap.); third, that deaf people differ among themselves; fourth, the concentration of numbers of deaf people (throughout the question arose: Do we have enough students for this, do we have enough students for that?); fifth, the competition with others; and lastly the impoverished experience of many deaf people in contact with others and with the real world. Finally, it has been suggested that a commission be created to take the kind of steps that are indicated in the reports that you have just heard.

Specific Analysis Recommended

I would distill out from all of these reports this kind of illustrative rather than exhaustive charge to the commission: First, an analysis of ongoing programs to determine which need to be eliminated, which need to be modified, which need to be expanded, and which need to be redirected. This, I believe, is an attainable goal. Secondly, an analysis of the population to be served. We have a good start in the regional reports. This should supplement what we have as we reach a moment of decision, and this analysis will deal with a description of the population with respect to intelligence, educational achievement, skill in communication, and any other handicaps, and in a sense certain social and economic attributes of the population.

Another part of the analysis, extremely critical, is the magnitude of the problem; then the geographical distribution of our people; and, something difficult to determine but which I believe must be determined, the aspirations and preferences of the people themselves, their parents, and people who have to make decisions for them. There seems to be a recommendation that there be one or more centers, and obviously one will have to look at a set of criteria, some of which have been suggested, for location, for the offerings of such a center, and for its size, its relation to other institutions and agencies, and its admission policy. We have talked, we have listened; I know some of you will return to your homes and your jobs a bit disappointed, some will be inspired, others will have second thoughts about what they should have said. I think, though, that we here have taken major steps to create or to make available to deaf people one of the essentials of the major ingredients to self-realization: opportunity to pursue a calling that is appropriately remunerated and personally satisfying.

APPENDIX

MANPOWER

Abraham Stahler
Chief, Division of Manpower Evaluation
Office of Manpower, Automation and Training
U. S. Department of Labor

To make progress in providing increased vocational opportunities for the deaf, it is basic that we have an understanding of the manpower needs and trends not only in the nation, but, perhaps more important, in our own communities and in our regions, and of the effect that they have on employment opportunities. For we must be concerned not merely with training, but with training for what?

We are living in an era in which more changes are taking place in our everyday life--and at a more rapid pace--than in any comparable era in history. For example, in our short lifetime we have seen methods of transportation range from the horse and wagon to space ships traveling at speeds of 18,000 miles an hour or more. And we have seen hand tools and machine tools turn into electronic marvels which hardly need the touch of man.

These developments are having an impact not only on our way of living, but also on our way of making a living. They obviously will have a profound effect on job opportunities for the deaf, as we see brand new industries emerging and developing. And business and industry, as well as Government, are making tremendous investments in research and development, in new plants and equipment, accelerating the many changes that have been taking place.

Population Growth Magnifies Problem

Other developments are having their impact, too. One is the tremendous growth in population during recent years. From 1900 to 1950 the population of the United States increased by about 75 million people. From 1950 to 1960 there was an increase of about 30 million people. From 1960 to 1970 there will have been another increase of about 30 million. So, on the one hand there will be more consumers and hence more production and more services needed; at the same time there is bound to be a great deal more competition for jobs because these postwar babies are already out seeking jobs. The deaf, like other people, must compete with these new entrants in the labor market.

Other changes are taking place which also affect the job market. There are changes constantly in consumers' tastes and preferences. Also, there are tremendous movements of industry. For example, when industries decide to automate it is not unusual for them to move their plants completely from one area to another, build a new automated plant and hire a virtually new work force. This, of course, has an effect on opportunities and possible mobility of the deaf.

Because of the technological and other developments, fewer workers will be needed to produce goods than will be needed to provide services--education and health services, repairs of cars and appliances, for example. In 1950 for the first time in American history the number of workers in service industries became greater than the number of workers in production industries, and the differential between the two has been widening ever since. In 1956 another important development took place in the American economy: employment in white-collar jobs surpassed employment in blue-collar jobs, and here, too, the gap has been widening ever since. We find also that requirements for higher education and higher skills are taking place in both white- and blue-collar occupations.

In order to plan vocational education courses and activities, it is essential that we know not only what the job opportunities and the employer requirements are today, but we must know what they are likely to be tomorrow because you cannot prepare people for what there is today. In fact, too often, I think, we prepare people for what was yesterday. We need to know what there is to be in five years or ten years ahead. Studies in the Department of Labor indicate the following trends that are taking place:

Major Industrial Trends

It is expected that there will be over a million and a half fewer farm workers in 1975 than there were in 1960 due to the dramatic rise in output per worker that is taking place and will likely continue to take place on the farms.

Employment other than farm, however, will rise considerably, by about 37 per cent during the period of 1960 to 1975. There are expected to be over 23 million more workers in nonfarm occupations. Because of the greater demand for various services, employment in the service industries is expected to go up by a tremendous 61 per cent. And there is a wide variety of occupations here.

There is likely to be a continuing large increase in contract construction. More new homes, including apartment buildings, more schools, hospitals, roads, bridges, and industrial plants and office buildings are going up. It is anticipated that employment in the contract construction industry will go up by about 52 per cent in this 15-year period. There is also a wide variety of occupational opportunities here.

Because of the greater demand for education, for public health services, for welfare services, for police and fire protection, for road maintenance, etc., in view of the increased population, the movement of people to urban areas, from cities to suburbs, and other developments, employment by state and local governments is expected to go up also by about 50 per cent. Little change is expected in Federal employment during this period.

Despite the wider use of electronic data processing and other technological improvements, employment in finance, real estate, and insurance is expected to increase by about 44 per cent. Employment growth in the banking industry is expected to be especially rapid. These industries should offer opportunities for the deaf.

There is expected to be a big increase also in employment in the wholesale and retail trade, about 37 per cent, despite the number of vending machines and self-service methods that are being introduced.

In spite of the increase in manufactured products to meet the demands of a greatly increased population and probable higher standards of living, employment in manufacturing industries is not expected to go up as fast as in the other industries I mentioned. It will likely go up only about 25 per cent, or far less than the average 37 per cent in nonfarm employment, particularly because of the technological advances in manufacturing.

These figures can be somewhat misleading because even though employment is likely to go up only about 25 per cent in manufacturing, for example, there are far more opportunities for employment in manufacturing than in any other industry. There are expected to be approximately 20 million jobs in manufacturing. There should be opportunities for the deaf in all industries, including those in which there will be a decline in employment, as in agriculture. However, I think it is important to know in what industries the greatest increases are taking place so that appropriate emphasis may be given in planning vocational courses for work in those industries in which the deaf person is most likely to find employment opportunities, and, of course, to stay.

Major Occupational Trends

There is clearly a trend toward a rising demand for workers with higher levels of education and skills and away from unskilled and lesser occupations. I think this is very important to you because, if I read the data correctly about education of the deaf, the majority of deaf people have not gone much beyond elementary school. Certainly, many, if not most, of these people are going to be completely lost in the labor markets of today and even more so tomorrow unless there is much more education and training made available to them and they are motivated to take such training and education.

There is also, as I said earlier, a much greater increase in employment in white-collar occupations than in blue-collar jobs coming up. For example, white-collar employment will be going up by about 46 per cent between 1960 and 1975; blue-collar employment will also be going up, but only at the rate of about 21 per cent. I believe the deaf have historically been employed largely in blue-collar occupations. It is perhaps time to think seriously about probable opportunities in white-collar occupations and in service jobs.

The biggest proportionate increase is expected to be in professional and technical occupations--an increase of about 65 per cent more workers, particularly in such fields as teaching, health, social sciences, engineering, and the natural sciences.

There is expected to be a significant increase in clerical workers, in spite of electronic data processing. It is anticipated that there will be about a 45 per cent increase here. I think this should be encouraging to you.

Despite the vending machines and self-service, an increase of about 34 per cent in sales workers is anticipated. This area may not offer many opportunities for the deaf, but there should be some. It is expected that there will be a slightly above average increase, about 32 per cent, in managers, officials, and proprietors--an occupational level to which many of the more able deaf persons can obviously aspire. There will be an increase of about 15 per cent in service workers, such as practical nurses, hospital attendants, and cooks--an area offering excellent possibilities for the deaf.

On the other hand, in the blue-collar occupations, there will be about an average increase in mechanics, repairmen, building trades crafts, skilled metal workers, and the like--about 30 per cent. Employment of machine operators, largely because of automation, will be going up only about 18 per cent. The number of laborers will probably remain the same or will decline slightly because of many labor-saving devices.

I don't expect you to remember these figures, but I think you ought to be aware of the fact that these significant changes are taking place so that you can prepare realistically for the opportunities to come.

Employment and Unemployment

Another development taking place which is likely to affect the employment of the deaf is the fact that while employment is at the highest level that it has ever been, due to continuing economic growth, at the same time unemployment has been going up rather significantly. For example, in 1953 less than 2 million people were unemployed; these represented less than 3 per cent of the labor force. Ten years later, in 1963, total unemployment was over 4 million and the rate of unemployment was 5.7 per cent. In other words, unemployment doubled both numerically and proportionately in the ten-year period. What is happening is this: About one million new jobs are being created each year because of the economic growth of the United States, but at the same time 1.2 million people are entering the labor force each year. It is hoped that the recent tax cut and other measures being taken will result in enough new jobs to absorb at least the increase in the labor force. Realistically, there is tougher competition for job seekers of all kinds, including the deaf.

Implications for the Deaf

There are obviously important implications for the deaf in all of these developments. I'd like to touch on a few of them that I think are particularly important:

(1) You need to know not merely nationally, but in your own localities and regions, what the trends are in terms of job opportunities and of educational and skill requirements of jobs. It is important that you keep in touch with the Department of Labor and with offices of the state employment services to get up-to-date information on these changes.

(2) There is a tremendous need for more education and training and more realistic education and training geared to the needs of the changing job market. This is true at all levels of education. Unless the deaf get the

additional education and training required by jobs and employers, the chances of surviving in the labor market are going to be greatly reduced.

(3) There is a need to train for occupations in which there is the most critical demand for workers. The more an employer's needs, the more likely he is to accept a trained and qualified deaf person.

(4) To every extent possible, the deaf person should be better trained, more thoroughly trained than the hearing person because of the stiff competition for jobs.

(5) There is a need for training in broad skills rather than for single specialities in order to permit flexibility and adjustment to fast-changing jobs. There is also need for psychological preparation of the deaf for changes in jobs so that he is not unduly disturbed by the necessity of mastering a new skill or occupation.

(6) There is a need to provide opportunities for retraining because no longer can one expect to do the same job all his life. Studies indicate that on the average there will be about six jobs in one's working life.

(7) There is a vital need for a better means to appraise the aptitude, interests and traits of deaf persons. More realistic appraisal and counseling should help the deaf choose, prepare for, and follow occupations that not only offer employment, but ones that are in accord with their interests and capacities.

(8) There is a need to stress staying in school longer, getting as good an education as possible. Even if the job does not require a high school diploma, the employer often does. He feels that the person is more apt to be flexible, retrainable and promotable if he is at least a high school graduate. Besides, the employer usually has a large pool of high school graduates to draw from. Unless one has a high school education, his chances of getting employment are much less.

(9) There is a need to reach undereducated adults as well as youths and to provide them with the needed language and mathematical skills as well as vocational training. Otherwise, they will be lost in today's fast-changing labor market.

(10) There is a need to explore the greater use of on-the-job training and the combination of work and training in order to facilitate the adjustment of the deaf person to the work situation, to working with hearing persons, and to the practical application of training he receives.

(11) There is a need to help the deaf develop personal traits that employers are so widely seeking in the persons they hire. To many employers, these are even more important than the skills the worker brings to the job. Employers are interested particularly in workers who have a deep sense of responsibility, maturity, dependability, punctuality, judgment, flexibility, and ability to get along with others--their bosses as well as their co-workers. Deaf persons

who possess these traits as well as the required skill and education are usually more readily placeable and at the same time can do a great deal to improve the employer's and his co-workers' image of the deaf.

(12) Finally, I think it is extremely important to teach the deaf how to go after jobs, especially in view of the stiff competition they face. Through group guidance sessions, role playing and other means, they need to be taught where and how to look for work, how to fill out an application, what grooming is needed to make a favorable impression on the employer, what references are needed, and how to present their qualifications during the interview. Knowing these things will often mean the difference between getting and not getting a job.

Conclusion

I hope that we in the Department of Labor can be of help to you in your tremendous challenge and undertaking. There are many Department of Labor publications that may be of considerable assistance. Grants for research and possible experimental and demonstration programs are another possible source of assistance.

It is no easy task to overcome the obstacles confronting the deaf or other handicapped persons in preparing for, in entering, and in sticking in the world of work. But we must start with the assumption that there is hardly a person who wants employment who cannot be prepared and placed in suitable employment when enough effort and imagination are put into it.

WHAT IS DEAFNESS?

S. Richard Silverman, Director
Central Institute for the Deaf

Chairman Hester has assigned me the keynote task for this important conference and has suggested that I address myself to the topic "What is Deafness?" This is indeed a formidable task, particularly when it must be accomplished in twenty minutes for a group that includes many who have given a lifetime of professional service to deaf people, individuals who have never seen a deaf person, and significantly, deaf people themselves. I take note of the difficulty of the assignment not to create, before the fact, a sympathetic attitude in your evaluation of the manner in which it is carried out but rather to warn us throughout this conference not to be beguiled by the deceptive simplicity of the question, "What is Deafness?" Rather, all of us, experts in deafness and workers from allied fields alike, must be constantly aware, in our deliberation here in Knoxville, of the complexity of the problem that confronts us as it expresses itself in the topic of this keynote address.

What really is deafness? Is it a number on a decibel scale that describes the severity of hearing impairment? Is it a disease like mumps or measles or meningitis? Is it a piece of tissue in the auditory system that would be judged to be abnormal if viewed under a microscope? Is it an affliction to be conquered by the ingenious scientist? Is it the burden of a child whose parent hopes persistently and fervently that the scientist will be successful, and soon? Is it a special mode of communication? Is it something that is encountered occasionally in the man or woman whose fingers fly and whose utterances are arythmic and strident? Is it a cause to which diligent, skillful and patient teachers have committed themselves for generations? Is it the agony of isolation from a piece of the real world? Is it the joy of accomplishment that mocks the handicap? Is it the bright mind and the potentially capable hands for which the economy has no use because they are uncultivated? Is it a crystallization of attitudes of a distinctive group whose deafness, modes of communication and other associated attributes, such as previous education, that they have in common, cause them to band together to achieve social and economic self-realization? Of course, it is all of these and more, depending on who asks the question and why.

In seeking the answer to the question, each one of us has his own motives, his own purposes and his own responsibilities. The public official is concerned with the magnitude and severity of the problem, with ways of organizing to solve it with legislative needs, with costs; the educator considers the physical plant, personnel requirements, methods of instruction and communication; the investigator studies causes and pathology of deafness, its "psychology," its management; the rehabilitator is sensitive to training and job opportunities and the deaf person himself and those close to him seek the opportunity for him to be all he can and wants to be. As in the legend of the three blind men it is difficult to perceive and comprehend the whole elephant. Time does not permit the grand synthesis here.

The mission of this conference and the demands of time suggest that I orient my remarks on deafness to the topic of communication and to the educational, psychological and vocational considerations associated with it even though all the questions I have raised are in some way pertinent to our conference task.

Chief Mode of Early Education is Auditory

For the persons we are here concerned with, the essential and primary channel for receiving the acoustic symbols we call speech is either absent or severely restricted. All the skills of communication that depend on learning over this channel are adversely affected. From infancy to early school age, the chief mode of communication for the normal hearing child is auditory. The child hears and learns to talk from what he hears. Furthermore, he not only learns how to communicate; he also learns what to communicate.

For a child who does not have the daily experience of listening to language, its acquisition is indeed difficult, if not impossible for some, even with instruction. English, with its multiple meanings, its abstractions and its syntactical complexities, is a tough language to learn. For example, a teacher may teach the verb "to run," by performing the act. But what does the child do with such items of language as "the street runs north and south," "the water is running," "the man runs his business," "who is running for President?", "The Battle of Bull Run," and so on. As I said before, the teacher may teach "to run" by performing the act but how does she teach the verb "to hope?" In other words, the teacher is confronted with the task of communicating language to a child in the absence of the sensory system considered to be essential for its acquisition.

The educator, therefore, must seek ways to manipulating information so that it can be transmitted over whatever sensory system or combination of systems--vision, touch, residual hearing. At the same time, we are concerned about the content of what we communicate--language and subject matter, as it is influenced by the demands of society and the child himself.

The task of education begins with a thorough description of the nature and severity of the impediment to communication. (For our purposes it is not necessary to dwell on improved methods of otologic, neurologic and audiologic assessment.)

Need for More Sharply Focused Testing

The time-honored approach to the psychological and educational assessment of deaf children and adults, for that matter, has been to compare their performance with that of hearing persons on tests designed for the latter. Evaluation of intelligence, motor ability, social maturity, personality and perceptual skills have generally followed this pattern. Fortunately, the diffuse and indiscriminate use of such tests is yielding to more sharply focused testing that is more appropriate for our needs. For example, we are increasingly concerned about the nature of deafness itself and its effect on the total outlook and behavior of deaf persons and not merely as a cause of inability to communicate verbally. We are interested in the visual perception of deaf people not only because most of them are likely to receive a major portion of information about the external world by this means, but because deprivation of auditory experience may affect visual perception. And so, such topics as span and fluctuations of perception, grouping of stimuli, influence of context and precision of perception are relevant to an understanding of the visual tasks confronting deaf people.

Some among us eschew the notion that deaf persons may be described only by some measure of central tendency of them that is in turn referred to a similar measure for the hearing. They reject the stereotypes that this practice creates, particularly for the uninitiated. Deaf persons for them are not an undifferentiated monolithic mass but each is an individual for whom his personality is as unique as his fingerprints. We are hopeful that the psychologists and psychiatrists who rummage around in the psyche of the deaf person will soon be able to tell us to what extent, and if at all, a distinctive psychology of deafness is a valid concept.

In no situation are we more cautious about the validity of comparing deaf and hearing children than in educational assessment. True it is that a substantial body of us aims to educate deaf children with hearing children. Many do not hold to this view. Nevertheless, it is recognized that the performance of deaf children needs to be related to that of their hearing peers. Yet, the conventional tests do not describe adequately language and language-related aptitudes, skills and problems of deaf children. For that matter, they may be woefully inadequate for incisive probing of the language of hearing children.

Improved Teaching Methods Sought

We know how fundamental language is for our people. Essential for an improved understanding of how it is learned and consequently of how it should be taught is a satisfactory description of language. Investigators and teachers have sought diligently for descriptions and measures beyond those yielded by standard tests. They have not been satisfied by vague and frequently misleading assertions about deaf children being "two to five years retarded" or about their having typical "deaf language." The better descriptions of language that are being studied may lead to improved methods of teaching vocabulary, syntactical patterns and the semantic rules that relate words or sentences to things or events, and they may help us with the subtle and little understood interweaving of the learning of language and the forming of concepts.

To Learn, Child Must Communicate

If a child is to learn, he must communicate in some way. However much we may differ among ourselves in the emphasis we place on the teaching of speech to deaf children, we all agree that it must have a prominent place in his education as a fundamental tool of communication. For many of us it is an essential skill to be cultivated in deaf persons, and its study is of commanding interest to us. The teaching of speech and our results still appear to be affected by our attitudes toward it. For some speech is a subject to be taught like a foreign language to those who can "benefit" from it. Practice and atmosphere are not conducive to vitalizing speech for the child. Rather, speech is viewed as a "nice" skill to cultivate. For others, speech is a basic means of communication and hence is a vital mechanism of adjustment to the communicating world about us. They would set the stage for the child everywhere--in the home, on the playground, in the schoolroom--from the moment deafness is determined so that speech becomes purposeful for the child at all times. We are all interested in the evaluation of the speech of deaf persons. By evaluation of speech, I mean not just its intelligibility, but its practical long-range social usefulness. We have come to learn that intelligibility and social usefulness are not always linearly related. Attitudes of talker and listener having to do with confidence, encouragement, frustration, motivation all play their role in the use a deaf person makes of his speech.

Better Assessments of Lip Reading and Manual Communication Needed

When we turn to lip reading we find that we can make rather reliable judgments about who is a good, bad, or indifferent lip reader. Ingenious attempts have been made to relate intelligence, educational achievement, hearing loss, time of onset of deafness, linguistic and perceptual skills and personality to these judgments. Although there are promising leads here and there and the value of lip reading in bisensory communication is being demonstrated for some people, the failure of a clear pattern of relationships to emerge continues to frustrate us.

The overwhelming amount of literature on manual forms of communication reveals an intense evangelism for and against. There is a growing urge, however, to study objectively and rigorously the contribution of these methods to academic and social efficiency. We look forward eagerly to results of investigations that associate the manual alphabet with the teaching of speech and language and to continuing analysis of the linguistic features of early gesture and of formal signs.

The massive fund of knowledge about hearing and the evolution of hearing aids and electro-acoustic instruments and methods have caused us to be hopeful about transmitting important, if not all, the features of speech over severely restricted auditory channels. Yet the maximum exploitation of these possibilities is still limited by our incomplete knowledge of normal and abnormal hearing. We still search for incontrovertible laws that govern the encoding of information by the ear for transmission to the central nervous system.

Aims for Deaf Must be Clarified

In the final analysis, how we educate any child depends on the outlook we have for him. This outlook may be determined, among other considerations, by our own value system, by our experience with post-school accommodation and adjustment of deaf persons, by our own education and indoctrination, by our professional training, by our relation to deaf persons, or by some combination of these. I would be less than candid if I did not call to the attention of members of the conference whose primary professional responsibilities are not with deaf persons that there exists controversy about how deaf children shall be educated. I believe that a major source of the controversy is the difference in outlook we have for deaf persons. There are those who would gear an educational program to the production of contented members of a sub-culture secure in its mores, its sanctions, its modes of communication and its opportunities for social expression. Others reject the validity of the sub-culture concept for deaf people and strive toward their complete assimilation in the world of the hearing. Still others recognize the possibility of constructive combination of both ideas and attempt the difficult and undramatic task of maintaining flexibility.

It is obvious that these attitudes influence not only the means of communication in the classroom and the content and nature of the course of study, but they have a direct bearing on the organizational and administrative arrangements--day or residential, integrated or segregated, age at which instruction begins--that we make for the education of deaf children and the important and essential practice of guiding and counseling parents. Convincing evidence about these matters is discouragingly meager. We tend to regale our opponents with anecdotes drawn from extreme ends of a statistical distribution about their "failure" and our "successes."

Economic Well-Being Essential for Deaf, Too

Nevertheless, we do agree that economic well-being is an essential ingredient of individual and social self-realization. This conference points up the growing concern in the United States of educators, economists, labor and business leaders, criminologists, social workers, and lawmakers about the increasing number of young people between the ages of 17 and 22 who enter the labor market without marketable skills or with skills that at best are marginal. The technological revolution that goes on at a rapidly increasing pace is drastically reducing the employment opportunity for those with marginal or obsolescing skills.

We cannot ignore this distressing situation since realism compels us to recognize that in any economy our students may find their economic opportunities limited. The burgeoning technology compounds our problems and underlines our responsibility. The old panacea, "Give them vocational training," will no longer do. Vocational training for what? Educators are faced with the perplexing problem of preparing young people for jobs that at the time of their schooling do not yet exist. Furthermore, specific vocations for which they are being prepared may cease to exist when the students graduate or after they have been employed for a discouragingly short time.

Solutions Not in Sight--Must be Found

Final and complete solutions are not yet in sight. But one principle is becoming increasingly clear: We must equip young people with those fundamental skills that enable them to acquire new skills when the situation demands that they do so. They must be prepared to accommodate to change. For workers with deaf people it means that we must renew and reinvigorate our efforts to minimize the obstacle of inferior communication that may block the path to vocational success. Knowledgable people have suggested that we must extend the period of time over which we stress such skills as reading, languages, and mathematics. Our people must learn to learn

Whatever our answer is to the question "What is Deafness?" I humbly suggest that this conference gives a magnificent opportunity to quicken the fundamental driving force of our American value system--to give every individual despite his personal adversity a chance to be all that he can and wants to be. Let us seize it now.

THE DEAF IN THE WORLD OF WORK

Robert G. Sanderson, President
The National Association of the Deaf

It is my feeling that the decisions to be made here may vitally affect the vocational, educational and social welfare of the deaf people of our country for the next century. I hope that we choose the right course and pursue it aggressively.

Reactions of Deaf People to Some of Their Problems

It is difficult to consider the reactions of deaf people to their lack of vocational opportunities as an isolated phenotype; anyone who is familiar with the deaf knows that their handicap creates an intricate maze of related problems...some of which began on the day that the parents discovered their child was deaf. Although it may be wishful thinking, it might be useful, for example, if our rehabilitation specialists could diagnose the individual's problems and evaluate his capabilities in the light of the type of rearing the parents provided and the educational philosophy that worked its will upon him--among his other handicaps.

I have discovered that even the slowest and least capable of the deaf people I know are very much aware of their limitations, shortcomings, and specifically their lack of training. Repeatedly they have told me they wished they could get the training they needed for a particular job they would like to have; that they have been short-changed, so to speak, by those who were genuinely trying to help them--the rehabilitation consultants of the DVR. Some of my deaf people have stated flatly "that the DVR man just wanted to get them working at any old job," not one in which they had a marked interest.

Over many a year the picture that impresses me is that there is a great lack of communication between the rehabilitation specialist and the deaf client and little or no systematic effort to provide training opportunities in keeping with the changing times.

The situation in Utah may not be typical of the rest of the nation, but in reading about problems of providing adequate training for the deaf people in other parts of the country I see the same familiar pattern emerging again: inadequate counseling and guidance; too few persons trained to deal with the deaf client; and even when the counseling is competent there is still the near total lack of vocational and technical training opportunities at a level where deaf people of varying abilities can participate profitably.

I am not overlooking the fact that junior colleges do provide some opportunities for a few of the better students. I note that the dropout problem has forced a more rigid screening. This seems to me to defeat the purposes of providing vocational training for those who need it most: the average deaf students. The young deaf person who has left school and is looking for a job nearly always ends up in a division of the vocational rehabilitation office. If he does not go there directly, employment services invariably refer him there when it is found that he has skill for which there is no market, or no skill at all in the case of some oral day school graduates. The added load on rehabilitation services, which really is not supposed to be an employment or placement service, sometimes results in strained relationships between them and the schools.

I have heard it said very earnestly that schools for the deaf which provide only a half day of academic education are never going to catch up with normal public schools which provide a full day of classes, regardless of the system of communication used. The deaf people who have been through such schools bear witness to the fact that four hours of school, two of shop work and two of physical education--an eight-hour day--are not adequate for all. That many of our deaf students do continue on to Gallaudet College, and a few to public universities, is a stunning achievement; but I lean to the belief that it is due more to capacity, drive and desire of the individual than it is to the system.

Greatest Concern: The Deaf of Average Ability

I am not worried about young people of college calibre. Their vocational opportunities will broaden with a better education. But I am deeply concerned about deaf people who are only "average." They are having increasingly difficult times in finding any kind of employment. Of course, this applies not only to young people just out of schools; it applies to adults, too. They are being displaced by automation. Jobs which were reasonably secure--such as those of linotypers in newspaper composing rooms--are suddenly being eliminated.

The problem our deaf face is real, it is here and now. If they lose their jobs because of automation or technological changes, where do they go? To whom do they turn? How will they keep up their home mortgage payments, their automobile payments?

Yes, our deaf people are in, or are facing, serious trouble, the magnitude of which we are just now beginning to perceive. What are we to do for them?

What Do Deaf People Want From The Hearing World?

Very little, really; no more or less than is available to normal hearing people. Again and again I have had my deaf friends tell me "I wish I had the chance to enter the local trade school, but they have no program for the deaf." These deaf admit that the communication difficulty is just too great for them to overcome when they enroll in classes for the hearing. They want opportunities that they do not have.

Of course, the deaf are universal in their desire for understanding; they ask that the hearing try to understand their broken English and poor speech; they ask that the hearing try to understand the problems of learning posed by deafness and make allowances for their lack of a broad, general education. Given these small concessions, our deaf people can demonstrate that they can compete effectively for jobs with hearing people--provided they have equivalent training in vocations.

There is one more thing that the deaf want and seldom get: equality of treatment and opportunity to advance. All too often the best workers are held back by the belief in management that the deaf cannot advance because they cannot use the telephone. Some administrative jobs are thus closed to qualified deaf people--although the same management that uses many secretaries cannot seem to envision the proven practicality of a secretary who is also a competent translator and interpreter for the deaf.

What Are The Deaf Themselves Doing In An Attempt To Alleviate Some Of Their Problems?

That is a fair question. We deaf people do not want to give the impression that we want everything done for us.

Let me mention a few of the things that the National Association of the Deaf has done and is doing.

...For 84 years the NAD has continually engaged in a public relations campaign to sell the idea to industry and business that "Hiring the Deaf is Good Business." And those industries which have taken us up on that promise have found it to be true. If I may generalize, the work record of the deaf is as good as, and mostly better than, that of the hearing; to confirm this I can point to such diverse industries as the rubber industry in Ohio and the luggage industry in Colorado.

...The NAD has, throughout its history, agitated for better education of the deaf, for better and more extensive vocational training in schools for the deaf (although we are revising and modifying that attitude in an effort to keep up with the rapidly changing times); agitating, I say, like that which I am doing here and now!

...The NAD has actively struggled to open up more opportunities in civil service for qualified deaf people; and we have succeeded in a surprising number of cases. We are still working on this.

...Our members, among them local leaders of our cooperating state associations, acting through information furnished in our news medium, THE DEAF AMERICAN (formerly the Silent Worker), and sometimes on their own initiative, have instigated and have aided in setting up adult education programs in an effort to upgrade the ability of our deaf people to understand this modern world.

...We have pioneered in new fields of employment; and we have been directly responsible, as members and leaders of the NAD and cooperating state associations, for the hiring of many deaf people who have followed us.

...We have encouraged the deaf in and out of our organization to participate actively in community affairs as a method of getting social problems of deafness before the public. We encourage them to accept responsibility despite the tremendous handicap in communication.

Now, it pleases me to announce that the Executive Board of the National Association of the Deaf has agreed with me that we should support the idea of a National Technical Institute for the Deaf, financed by the federal government in the same manner as Gallaudet College, and work actively toward its fulfillment. Further, we support the idea of regional vocational schools for the deaf where deaf students who are not of college or technical school calibre may obtain vocational training in keeping with the demands of modern industry; we believe such schools would release more time and energy for the schools for the deaf to concentrate on the severe problems of upgrading the basic education of the deaf. We take this stand in the full realization of the many problems yet to be worked out.

THE NEW ENGLAND SURVEY OF THE YOUNG ADULT DEAF

Edmund B. Boatner, Superintendent
American School for Deaf

Background

The education of the deaf is a very recent undertaking when compared to the formal education of the hearing. The first organized school for the deaf in the world was established only 200 years ago and the first school for the deaf in the United States was begun less than 150 years ago.

This very significant fact bears on the present day educational problems of the deaf. For it was not by chance or because of callousness that the deaf have not been taught throughout the greater part of history. It was because the handicaps imposed by deafness were so severe and the problems of teaching the deaf were so complex that no effective approaches were found until comparatively recently, and these are far from producing the results which we desire.

We know that the "miracle work," as teaching the deaf was earlier regarded, consists largely of hard work on the part of capable teachers and able students. We know that with these indispensable factors the deaf can secure an effective education in both the academic and vocational fields, but we also know that it is a most difficult undertaking which requires unrelenting effort and the use of every possible aid.

There is nothing easy about the education of the deaf. In many ways, it remains the most difficult of all educational fields. The road up through the secondary and higher levels of education is still as steep as the Himalayas to the great majority of the deaf. To a great degree the problems of reading, language, and communication remain unsolved. And, while advances have been made in new techniques and particularly in electronic hearing aids, our overall problem has become more difficult due to the modern trends in general education and the rapid changes in our increasingly complex society. This is particularly true in vocational education, and this is the fundamental reason for the New England Survey.

Vocational Education

In any organized society there is no more basic need of the young adult than to be able to earn a living by the performance of some needed function. To be needed is almost as essential as air, water or food. And, a living connotes more than the bare essentials: the attaining of means to enjoy a home, a family, education and a reasonable sharing of the many good things that our society affords. Any program of education that does not equip the individual to attain these benefits is basically deficient.

The founders of the early schools for the deaf were keenly aware of these needs and were among the first to include vocational training in their instruction. Woodworking, shoemaking, and tailoring were the courses most generally offered and all led directly to specific, useful occupations. From that day to this, schools for the deaf have continued to offer various types of vocational training but have been increasingly unable to give their students the type of training demanded by business and industry. It is quite possible that the students leaving our schools for the deaf 100 years ago were better prepared for the occupations of their day than our students are today.

The inadequacy of the vocational training available to the deaf has been a matter of serious concern to many educators for a long time and many proposals have been put forward to meet this pressing problem. For example, in 1888, Dr. S. Rogers, a teacher in the South Carolina School, recommended a national polytechnic institute for the deaf. The most recent proposals prior to the present study were those put forward by Harvey Barnes in 1940 and Roy Parks in 1947 both of whom favored special centers for training the deaf. Despite the awareness of the problem and the many articles on the subject no implementation has been attempted.

It would seem that we have talked about this great need of the deaf long enough without doing something about it.

I have felt that it was desirable to give this brief background before specifically discussing the New England Survey and its results. I will not go into the details of the origin of the survey as a brief paper giving this information is available. I will try to bring out as concisely as I can the aims of the survey, its organization and operation, its scope, its statistical data, and its conclusions.

Due to time limitations, it will not be possible to include as many details of the 131-page report as I would like to do. Copies are available, however, for study and reference. The results of the Southwestern Survey which is using the same questionnaires and techniques will be available in the near future to supplement the information secured in New England.

Aim of the Survey

The specific aim of the survey was to determine the occupational status of the young adult deaf of New England and the need and demand for a regional vocational training center especially for the deaf. The study of the young adult deaf included all students of 16 or over who had left or graduated from eight residential schools and one day school during the seven-year period from 1957 to 1963 inclusive. One recently established residential school was not included since it had had no leaving students over 16.

Also included in the study were students now in the schools who were expected to graduate in 1964 and 1965.

Organization and Procedures

Approval of a grant for the survey was received from the Vocational Rehabilitation Administration in May, 1963, with a stipulation that a preplanning study and sampling be made to develop and test the questionnaires and techniques which would be used.

We were fortunate in obtaining Dr. Ross Stuckless of the University of Pittsburgh as principal investigator. Dr. Stuckless had had wide experience with the deaf and had conducted extensive studies and research in this field of education. He was assisted by Mr. Donald Moores of the staff of the American School for the Deaf who had been associated with Dr. Stuckless on previous similar work. The interviews were conducted by Mr. Moores, assisted by four interviewers who were well acquainted with the deaf and were able to communicate with them fluently.

We were greatly aided by an advisory committee of leading educators, experts in rehabilitation, representatives of the deaf, and a prominent industrialist. We also benefitted from the counsel of a plannning committee composed of the heads of all the New England schools for the deaf who gave us cooperation in every way possible. Both the advisory and planning committees met twice. First, they met to assist in the planning of the investigation, to review the design of the questionnaires and the collection of data and, last to assist in the preparation of the conclusions and to discuss the implications to the deaf of New England.

It was realized that in order to get a true picture of the occupational status of the young adult deaf it was necessary to collect information on their occupations, education, aptitudes, and aspirations. It was also necessary to find what opportunities were available to them in academic and trade schools for the hearing, and, finally to determine their needs and their demands for a special vocational training center.

Much care was given to the development of extensive questionnaire forms which were then field tested and revised. They included:

Interview form for young adult deaf
Interview for immediate supervisors
Questionnaire for parents
Questionnaire for heads of hearing programs
Form for administrators of schools for the deaf

Numbers

The number of deaf students of 16 years or over who leave the schools each year is a basic factor in planning any program to meet their needs for vocational training. For convenience only these students were referred to as graduates. The survey revealed that the number of graduates was substantially less than had been previously estimated.

The population of the nine schools was reported in the January, 1964, Annals as being 1,475. Of this number there were 177 juniors and seniors which would indicate an average of 88 graduates for '64 and '65. There were some duplications because a number of students enter the American School for the Deaf each year after leaving their respective schools. Most of these enter the junior class. For example, in the current school year 18 students who had completed the course in other New England schools for the deaf entered the American School for the Deaf at the junior grade or below. In addition, there were 13 transfer students over 16 who had one or more years to go before finishing their schools.

For the seven years from 1957-1963, there were 561 graduates or an average of 80 per year. These figures show that approximately 6 per cent of the students of the New England schools have graduated each year since 1957. These figures check closely with a recent national survey of the number of students leaving the schools for the deaf annually. It also indicates that a regional vocational school would need to serve a larger population than that of New England.

The 177 juniors and seniors and the 561 who had left between '57 and '63 were treated as two distinct groups. Each of the first group was individually interviewed and parents were sent questionnaires. Forty-four students were given the General Aptitude Test Battery.

Of the 561 graduates, 354 or 63 per cent were selected as a gross, random sample; the parents were sent questionnaires and 137 replied. Ninety-nine additional parents were successfully interviewed by telephone and in this way the occupational status of 236 graduates was determined. This represented 66 per cent of the gross random sample. One hundred and one employed graduates and a like number of immediate supervisors were interviewed on the job.

Questionnaires were sent to 39 schools for the hearing which had or formerly had deaf students. Thirty-two replied. Questionnaires were sent to the 92 vocational and technical schools listed in New England and 70 schools replied.

Results

Table 5 of the report shows the status of the 236 students who left the schools between '57 and '63 to be as follows:

Employed	Unemployed	Students	Others
124	25	71	16 (14 housewives and 2 mental patients)

Students included those attending academic, vocational, and commercial programs as well as transfer students attending the American School for the Deaf and students attending Gallaudet College. The students will be commented on later.

This indicates that of those available for employment 17 per cent are unemployed. This compared with 4.1 per cent for the State of Connecticut and was about four times the national average. No direct figures were available for comparison with a similar age group.

The 101 on-the-job interviews revealed that 71 per cent of the males were in semiskilled and unskilled positions which is twice the national average. The ratio for females was also much higher than the national average. This was borne out by the fact that the earnings of the deaf were shown to be from 22 to 35 per cent below earnings of hearing workers. At the same time, 85 per cent of the immediate supervisors saw little opportunity for the acquisition of higher skills or advancement without further formal training being provided for these workers.

Vocational Training in the Schools

No school for the deaf in New England offers a comprehensive vocational program.

The American School for the Deaf offers the most extensive program and accepts leaving students from other schools for vocational training. It has recently greatly expanded its machine shop course and has added IBM keypunch and programming equipment to its business practice course, but it is felt here that the best answer to the vocational education needs of the deaf is the eventual establishment of a specialized vocational training center to serve deaf youth between the ages of 18 and 22 and to provide for the retraining of the adult deaf.

It does not seem that regular schools for the deaf, carrying on an elementary and a partially secondary academic program, can be expected to conduct a comprehensive program of vocational education concurrently.

Graduate Education for Deaf Students

The survey attempted to find the answer to the very important question as to what extent and how successfully the deaf were able to get further education after leaving school.

Under the heading "Graduate Education for Deaf Students," on page 64, the report gives some statistics on students taking courses of some kind after leaving school.

Using information from the questionnaire returned by the parents of 137 graduates, it was found that 44 are currently students and that of the 72 employed, 31 have had some kind of instruction after graduating. From this it might appear that 75 or 56 per cent had received "graduate education." This inference would not be warranted. In the first place, it will be recalled that the term "graduate" was used for convenience in connection with all leaving students 16 years or over and it is by no means intended to convey the idea that 56 per cent of these students are taking graduate work as it is generally conceived. Further, it is realized that the 137 completed questionnaires may not be representative of the 217 graduates whose parents did not return the questionnaires. It is also noted that the programs varied from one month to four years and included noncredit evening courses, keypunch operation, and similar short courses, and two students taking vocational courses at the American School for the Deaf. How many were in the respective categories was not developed.

The analysis of the 137 questionnaires (Table 14) did reveal a very low rate of completion. There were only two academic graduates; 11 technical-vocational graduates; four commercial graduates and one graduate from Gallaudet College over the seven-year period from 1957 to 1963.

This leads to the conclusion that while many deaf students seek further education after graduation they are not able to find programs which meet their needs and which they can successfully complete.

A comprehensive study of this aspect of the education of the deaf is highly desirable.

Vocational Education for the Deaf in the Trade and Technical Schools

Another very important question was to what extent could the regular trade and technical schools meet the vocational education needs of the deaf. The answer here was much more sharply defined.

Ninety-two state supported trade and technical schools were sent questionnaires requesting information on any deaf students they may have had since 1957. Seventy schools responded, and gave the total number who had registered in this period as 22. Four are presently enrolled, eight had graduated, three took noncredit evening courses, and seven left or were dismissed. These 22 students do not represent a sampling but comprise the total number reported by the vocational and technical schools over a seven-year period as compared to the total number of 561 students who left the schools for the deaf during these years.

It is obvious that the trade and technical schools have been of very little help to the deaf of New England and, as presently conducted, are unable to meet the special needs of the deaf for vocational training.

Demand for Special Vocational Training Centers

A major objective of the survey was to determine the demand for special vocational training centers for the deaf.

Of 230 parents of students and employed young adults, 209 (91 per cent) approved the establishment of such a center, two disapproved and 19 were undecided. Many comments of parents were very touching in describing the great needs of their children for further training and better opportunities. Some of these comments are included in the appendix of the report.

Of 278 students and young employed adults, 202 (73 per cent) approved, 19 disapproved and 57 were undecided.

Seventy-four per cent of the parents would favor sending their children to a special center next fall if finances were not a problem, and more than 56 per cent of the employed deaf adults would leave their present jobs to attend such a center.

The heads of the participating schools went on record as unanimously endorsing the establishment of a special vocational center for the deaf.

Summary

The results of this survey show that:

1. A very high proportion of young deaf adults are employed in unskilled or semiskilled occupations.

2. The mean wages received by young deaf adults are much lower than for the hearing.

3. Their unemployment rate is much higher than that of the general population.

4. Very limited vocational education is given in schools for the deaf.

5. The regular trade and technical schools are of little help to the deaf.

6. Few deaf students have the aptitude and ability for higher academic education.

7. Many of the deaf demonstrate aptitudes that could lead to skilled occupations if they could receive the necessary training.

8. Without such training there is little prospect of advancement for most young deaf adults in their present occupations.

9. No satisfactory programs of vocational training are available to the deaf.

10. The parents of deaf students and young deaf adults are overwhelmingly in favor of the establishment of a special vocational training center for the deaf.

11. More than half of the graduating students would attend such a center on leaving school.

12. Over 50 per cent of employed young adults would leave their present jobs to attend such a center if it were available.

Conclusion

This study clearly demonstrates the need of young deaf adults for comprehensive vocational training suited to their needs. It also points to the regional center for the deaf as being the best way in which this training could be provided. For many reasons the schools for the deaf cannot be expected to meet this problem. Their chief concern should be the improvement of academic education of the deaf.

We are confident that when the results of this study are combined with those of the companion survey being conducted in the Southwestern States, the essential facts will be provided which we must consider in developing the vocational education program most needed by the deaf.

Programs for educating the deaf in connection with the hearing have many disadvantages and cannot meet the needs of the majority of the deaf. This has been recognized by the federal government for 100 years in its support of an institution of higher learning especially for the deaf. This support should be broadened to make possible the establishment and operation of regional vocational centers so that the far greater number of the deaf who do not have the aptitude for higher academic education may have the opportunity to secure the occupational advantages which they deserve.

VOCATIONAL PROGRAMS IN SCHOOLS FOR THE DEAF

Boyce R. Williams

Consultant, Deaf and the Hard of Hearing
Vocational Rehabilitation Administration

My responsibility this morning is to project a reasonably accurate picture of the shop programs in schools for the deaf. The title actually refers to vocational programs but I am apprehensive about using a word which has been the root of so much confusion among teachers of the deaf and deaf people themselves. Hence, my term is shop rather than vocational.

This is not an excursion in semantics. We must use precise terminology or we carry on indefinitely to no purpose the inconclusive discussions and thinking of these many years.

What are the characteristics of vocational training? Along with many other people, I choose to believe that vocational training is highly specific. It is specialized. It is terminal. It is aimed at certain employment that has been rather precisely predetermined. It has a very definite, limited, and immediate objective.

Proper Role of Special Education Program

The foregoing analysis helps me to keep in focus the proper function of shop programs in schools for the deaf. I hope that it will help focus the deliberations in this workshop similarly. If it does, we can admit the appropriate role of our ongoing special education program in the area of shop training without prejudice to activities aimed at reducing the persistent void in vocational or other training service for deaf youths and adults who are no longer in the special education structure.

An important first step may be to consider the makeup of the usual school for the deaf. The student body may have an age range from less than six years to over 20 with the distribution curve skewed toward the pre-teen level. The ratio of older students declines progressively and rapidly.

The major instructional emphasis is upon learning communication skills with subject matter following. In a week of seven days, or slightly less, the 14 year olds and up may have as many as 10 hours in shop training, little of which is geared to well structured courses of study.

The whole school may offer experience in important tools, materials and processes in the graphic arts, including linotyping and press work, the woodwork constellation, some leather work which is more likely than not to be shoe repairing, and possibly some but not much depth in machine shop work. Further experiences may lie in bookbinding, mechanical drawing, tailoring, agriculture, and building and grounds maintenance activities.

Schools for the Deaf Primarily Elementary

From the foregoing, it must be clear that our educational structure for the deaf is primarily elementary. The schools are overwhelmingly so in the complexion of both their students and the studies. The average male student departs from the school around 18 years of age. The students are, thus, immature physically, mentally, emotionally and socially.

In view of the aforementioned definition of vocational education as being highly specific and terminal and of the elementary nature of our schools and their students, it should be clear that vocational training is neither possible nor desirable in our schools for the deaf as now constituted.

Prevocational Training is Proper Role of Schools for the Deaf

Many workers in the field of the deaf have agreed that the proper role of shops in schools for the deaf is prevocational and that it should be so labeled. Prevocational can mean only one thing, that is, preliminary to vocational training. The role of the school shops then is both to lay a proper groundwork for vocational training that may be provided when the individual is mature enough to know what he wants to and can qualify to do and, of course, to develop good work habits, attitudes, and otherwise contribute to the mission of an elementary school. The fact that proper vocational training is in extremely short supply for many of the deaf is not an adequate reason for school shops to try to do something which is beyond their proper missions and capacities. As a matter of fact, the longstanding and persistent great void in proper vocational training opportunities for deaf people has had an inverse impact upon the schools which is manifested in their struggle to meet this great need as best they can.

It is moot whether their well-motivated efforts have been helpful in the long run. I say this because the acknowledged normal strength, mobility and intelligence of deaf people coupled to the good prevocational training inherent in school shop programs have enabled a substantial percentage of our deaf population to get by. They have gotten by as sharply underemployed albeit sometimes well paid people. Too frequently their admirable capacity to rise above the serious limitations of our available training programs to substantial levels of performance has turned the eye and mind of the professional away from the great needs of the larger number, away from the phantom nature of our vocational training offering. We have become engrossed in an illusion of success which is in fact not a product of our training, but in spite of it.

Time is Running Against the Deaf

The day of reckoning draws closer as the inroads of automation sharpen our concepts of the implication of the serious underdevelopment of our training resources for deaf people. We have little time.

These remarks should in no sense or at any time be construed to mean that the frequently excellent prevocational work in our schools for the deaf should be de-emphasized or left undeveloped beyond its current level. To the contrary, every resource, every law should be exploited to the hilt to beef up every prevocational training program in every school. It is well known that the strengths of deaf people lie in concrete areas rather than abstract. Like any good farmer who exploits his best soil, let us make better and more effective use of the shops in schools for the deaf to turn out better equipped, more competent deaf persons for the new and improved vocational training opportunities that this country must and will provide.

RECRUITMENT AND DEVELOPMENT OF VOCATIONAL STAFF

Charles M. Jochem, Superintendent
New Jersey School for the Deaf

Of the many and varied duties and responsibilities of a school administrator, perhaps the most important to the success of the school program is that of selecting and developing a well-trained and adequate staff.

Selecting good vocational staff is very time-consuming, and requires an ultimate amount of patience and determination. The results, however, can be most rewarding and educationally profitable.

The procedures used in recruiting and selecting vocational staff are quite different and more difficult than the routine followed when employing other professional people. In contrast to the selection of academic personnel, you do not have available a goodly number of people graduating from colleges and universities which have trained them in the skills and subject areas needed to teach. We are all aware of the serious shortage of teachers of the deaf. But, by comparison, there has always been an even more serious drought of good vocational instructors.

Administrator Must Know What He Wants

Before recruiting candidates, the administrator must be personally and professionally familiar with the aims and objectives of vocational education, the requirements of the particular trade, as well as the course of study the instructor will follow as a teaching guide.

"Shopping" for staff is surely no different than any other type of purchasing, for you must have a rather firm conception of what you are trying to buy as well as the determination and the patience to find the kind of person you want, and not be satisfied with a candidate in whom you do not have full and complete confidence.

Never forget that your students need and deserve the very best staff possible.

May I suggest that you discuss at length with your vocational principal the requirements of the position and then write them down. These specifications should include among other things: the desired educational background; trade training and experience; and contacts with youth other than family, such as scouting, camping, church or recreational activities or other community programs in which girls and boys are active. Participation in such programs not only indicates an active interest in young people, but it can be a valuable experience in working and getting along with children. A vocational teacher's personal appearance, personal habits, and behavior are as important as those of any other staff member, because we expect everyone to help in the proper character building of our students.

Vocational Teacher Should Have Three Qualities

To help develop and maintain a professional status with other members of the school staff, a vocational teacher must have a thorough knowledge of his trade, the necessary skills to successfully perform in it, and an adequate educational foundation upon which to build a professional career. He must have a deep and sincere interest in boys and girls, and an enthusiastic and dedicated conviction that he has something to contribute to the training and education of young people.

The age of a person coming into vocational teaching should be considered, for it does indicate certain facts which could be relevant to the situation. A very young man may not have the depth of trade experience you are looking for; an older man may not have kept up with the new developments and skills of his trade. I like to feel that a person is old enough for a thorough trade experience, a desired degree of maturity, and enough years of service to lend continuity and stability to a program.

I always look for a definite evidence of enthusiasm for his trade and especially the prospects of working with young people. All of these and many other assets are important, if we are to find a potentially successful teacher.

We may ask, "What is the most important factor in success?--Brains? Ability? Education? Perseverance? Technical skill?

None of these, according to most experts in the field. They're all important, of course, but there is one asset that is almost indispensable to success--and that is the ability to get along with people.

Minimum Requirements Listed

In addition to the many desirable qualifications we like to find in a vocational instructor, we in the New Jersey School for the Deaf must first start with the minimum qualifications required of all candidates for a vocational teaching position in New Jersey, as our vocational departments are state- and federal-approved programs. You may be interested in these minimum requirements:

1. A candidate must be a high school graduate or be able to pass a state high school equivalency test.

2. If he wishes to teach a skilled trade, he must have at least six years of successful experience in the particular trade he wishes to teach. In vocational agriculture five years is acceptable, and in the service occupations, three years. Teaching all technical subject requires B.S. Degree.

3. A candidate must pursue further study to the extent of 36 college credits: 18 in general background courses such as English, math, science, social studies, etc. and 18 credits in professional education courses such as principles of vocational education, curriculum construction, methods of shop teaching, methods of teaching related subjects, guidance, etc.

4. He must complete 150 clock-hours of in-service supervised student teaching.

All those selected must have potential for growth and development, therefore, and it is most encouraging to find a large percentage continue on to complete not only a bachelor's degree but also a master's degree.

Many Teacher Sources Approached

When in need of new vocational staff we use every available vehicle to spread the word. We usually start with the vocational schools of our state, since we keep a very close and pleasant relationship with them and know their teachers quite well. We also list our needs with the division of vocational education in our State Department of Education, for they not only know all the experienced teachers, but are acquainted with all those in training.

We talk with the salesmen of equipment, for they get into more shops than anyone, and they very often can give you good leads. We run ads in the large metropolitan dailies and a few selected weeklies. Trade magazines are also a good source of recruitment. If you are personally acquainted with union officials, they too can be helpful.

The object of all this beating of the bushes is of course to obtain as many candidates as possible in order to insure a good selection.

Not until you have narrowed down the candidates to a selected few, however, do you really come to grips with the most difficult problem of securing good vocational instructors.

And THAT, my friends, is MONEY.

Be sure you are up to date on the salaries paid in the trades in your area, or else you will be in for a real shock when you discuss salary. The present rate of pay in our Trenton area is $6.20 an hour for carpenters, $6.40 an hour for electricians, $6.40 an hour for metal workers, $5.10 an hour for printers, and so it goes.

Salary Level Must be Attractive

The administrator's problem is to offer, in some way, a comparable salary so that a person who really wants to teach and is willing to make a reasonable financial sacrifice can afford to do so. The administrator must be able to suggest or offer other means of income if he is to help close the gap in the applicant's annual salary as an instructor, in relation to the wages in his trade. In some cases, a vocational instructor can find ready summer employment in his trade, filling in for those on vacation; in other cases, the school can hire its vocational staff to do school maintenance during the summer recess.

Even though most schools adhere to a single salary scale, the administrator soon realizes he must, of necessity, pay higher beginning salaries to his vocational teachers, if he is to obtain the services of qualified people. We in education must also offer comparable fringe benefits which are so common in industry and business.

Fortunately, we in New Jersey are able to offer our professional staff fringe benefits which compare very favorably with other employers. For example, our educational staff are members of our New Jersey Teachers' Pension Plan, which is integrated with Social Security. They are covered by Blue Cross and Blue Shield as well as major medical and surgical. They may also purchase all these plans for their dependents. For 1 per cent of their salary they receive three times their salary in term life insurance. As an example, a teacher having a salary of $8,000 pays $80 per year for $24,000 of term life insurance. Professional staff are also given 15 days of sick leave each year, and these may accumulate indefinitely. These fringe benefits added to our salary range place us in a reasonably good competitive position when recruiting staff.

Obtaining good vocational staff is only the beginning of staff-building. We must, in addition, have an effective program of in-service education for our vocational teachers. The vocational instructor of today and tomorrow must be adequately prepared in both content and methodology.

Vocational Teachers Keep Up to Date

Every effort should be made to encourage our vocational people to also pursue courses in the skills and techniques of teaching the deaf. This is readily available to our folks as we are one of the schools cooperating in the federally-supported program to train teachers of the deaf. In fact, a number of our vocational staff have completed the entire teacher training program which qualifies them also as academic classroom teachers. This, we feel, is a most desirable trend which should result in the development of some excellent school administrators.

It is assumed, of course, that all vocational programs are administered, coordinated, and supervised by a highly competent vocational principal in order to insure the day-by-day assistance and direction needed by his instructors. We must constantly strive to raise the performance level of our staffs, if we are also to raise the performance level of our girls and boys.

High Percentage of Budget Goes to Staff

Before closing, may I briefly deal with staffing on a purely economic basis. The largest single item in a school budget is that of staff salaries. In fact, in the case of our school's operating budget for this year, we are expending $1,193,930.00 for staff out of a total budget of $1,490,126.16. Surely, the expenditure of 80 per cent of our total budget demands that we invest it wisely and profitably.

For the past 40 years the average length of service of our vocational staff has been approximately 20 years. We, therefore, exercise every known device to obtain the best people we can, for every time we hire a new vocational teacher we are making a $160,000 investment.

You have heard, I am sure, in many different ways that good staff makes good schools. Since most people concede that we are working with a group of girls and boys who present one of the most difficult educational problems, let us resolve that we shall make every possible effort to obtain the best possible staff, in order that we may maintain the best schools possible, that we may offer to our girls and boys the best possible program of training and education.

Our children need the best, they deserve the best, and therefore, they should have nothing less than the best.

ASPIRATIONS OF THE V.R.A. FOR DEAF PEOPLE

Corbett Reedy
Regional Representative
Vocational Rehabilitation Administration

Our topic is Aspirations of the Vocational Rehabilitation Administration for Deaf People. I would like to include in this topic the aspirations of all vocational education personnel, both state and federal, because we are inseparably joined in the state and federal program which seeks to bring vocational rehabilitation services to all disabled, including the deaf.

We in vocational rehabilitation have a great awareness of deafness in terms of its severe vocational handicapping effect. Some years ago I read a most interesting article in which the author sought to compare the relative effect vocationally of a number of disabling conditions. Interestingly, he said that loss of hands was the most serious of all handicaps for an otherwise normal person because more jobs would immediately pass out of the realm of possibility for him. Surprisingly, loss of communicative ability was named as the second most handicapping one. At that stage in my experience of working with disabled people, I would have regarded blindness or some of the more obvious disabilities as higher on the list. But as I listen to Dr. Silverman, whom I have heard on three occasions now, speak so dramatically of the barriers experienced by the deaf in learning, in social living, and in work, I can well believe that deafness is truly one of our most handicapping conditions.

The VRA, a cosponsor with the University of Tennessee in this conference, has very high hopes that as a result of the work by this group as a whole and its various sub-groups, we will come up with some new concepts regarding the learning and training potential of the deaf and of the resources which can and must be created today if the deaf are to make up that deficit which they and other handicapped people experience in this increasingly competitive age.

What of these aspirations of rehabilitation for the deaf? The first is the need of deaf people to be understood in both the sending and receiving of thoughts and information. So many of us who are charged with the grave responsibility for education and rehabilitation of the deaf are sometimes amazed at how poorly we are able to exchange thinking with them as one human being to another, especially in view of the highly personalized nature of the vocational rehabilitation process.

A second need is that the deaf person be treated as an individual, that he be not stereotyped psychologically, educationally, or vocationally. We aspire toward a vocational rehabilitation service that is structured to consider fully the individual differences of each client, his abilities, his aspirations, his opportunities. One of the traditions of vocational rehabilitation is that its service be kept highly personalized, and this attitude contributes, we think, to meeting this need.

A third goal is that there be no double standards, one for the deaf and one for the hearing population. We expect deaf people to be held to the same standards of performance as their hearing peers. Mankind, including the deaf, performs at lower levels when expectancy is lowered. The reverse is also true; if the expectation is raised, then the performance is raised. In vocational rehabilitation we do not and shall never reach downward toward performance that neither challenges nor satisfies deaf workers. We are determined that the hundreds of brilliant minds among the deaf that lie uncultivated for lack of challenging work goals shall be channeled into work that equates to the mind rather than to the communication limitation. This can be achieved only when standards of performance are the same for the deaf as for all other workers.

A fourth need relates to the problem of adequate time provided for deaf people to acquire the tools with which they may live up to their highest potentials. This problem has been manifested repeatedly in the widespread underdevelopment and underemployment of the deaf. Time is a vital ingredient of the training process. Undertraining is an important cause of underemployment. More time for training is one important weapon with which to attack underemployment.

We would mention here the limitation of an inferior education. Our discussions have covered largely the area of vocational training, but vocational selection, vocational fitness, and the floor and ceiling of vocational training are set in the levels of general education which the deaf acquire. And it is not realistic for us to think today of high levels of vocational achievement unless we can at the same time bring up the base of general education as well, because in the general population with all our youth, their ability to move into progressively higher, more complicated and more satisfying work has relied in every instance on a corresponding increase in the effectiveness of the prevocational, general educational level that each has enjoyed.

There is another concern which I have felt rather keenly throughout this conference. I feel that I am among friends who will understand a viewpoint that is somewhat different from that which is held by many of you. As a person who works more in the employment end of this business than in the education end, I want to express today our concern about what seems to me to be too strong a drift toward the continuation of the separation in the vocational preparation of the deaf from all other persons, so that their training in better vocational settings will be in "for deaf only" settings. It seems to me that this is something that you must think about very, very carefully. To pursue this principle can well defeat our desire to achieve a major broadening of work opportunities for the deaf. The trained deaf must go where the job is, and this may well be in a hearing world, in a hearing society. To aim at placement of the deaf only with other deaf workers places tremendous limitations on the outlook for good placement and job advancement. A new worker going into a hearing setting to work certainly would benefit by having had at least a portion of his training in the same area of social challenge and adjustment as that in which he will have to operate when he is an employee.

Let me share with you also some of the vocational rehabilitation thinking regarding the various modalities of vocational training that would be appropriate to the deaf and that should receive our consideration. I want to list six specific modalities. Appreciating the wide range in abilities and trainability of the deaf means that we must have just as wide resource as possible to meet all these needs. And it is for that purpose that I call your attention to these six modalities for vocational training.

One way to improve the vocational training of the deaf is the expansion and enrichment of the offering in schools serving the deaf, both residential and the day schools. Now I may be wrong, but it seems that I have sensed some drawing back by some of our most thoughtful and capable educators of the deaf here, that they may feel that in the proposal to have better academic education they will have to give up part of the vocational. To accomplish this enrichment of vocational education and at the same time to improve the quality of academic education is a real challenge to education administrators. But I think it can be done. It was Dr. Wetzel, a well-known principal of a large New York high school and author of one of the few practical books that I ever read on educational administration, who said this: "Anything that is educationally vital is administratively possible." So, we have faith that these dual goals can be worked out.

The second modality is the use of community jobs for training -- on-the-job training as we call it in vocational rehabilitation. Many of our best employers train their own. These are good jobs; they are career jobs, and one gets the training on the job. This training approach brings the business and industrial community into realistic contact with education and vocational rehabilitation. Every community has a wide range of such training opportunities. We want the deaf to have this opportunity when it is suitable to their needs.

A third modality is the use of regular technical and vocational training facilities already in operation in the community. We are seeing an unprecedented boom in the development of community vocational training facilities. Will we pass up this opportunity that the deaf may enjoy right at his own door?

A fourth modality is a relatively new type of facility which we call the comprehensive vocational rehabilitation center. This is a center that has wide offerings of genuine vocational training operating on a broad level of ability demands, but which covers also many other important areas: social development, planned recreation, medical supervision and assistance, psychological services, and so on. You find such centers today operating very sucessfully in Virginia, West Virginia, Georgia, Arkansas, Pennsylvania, and other states. I have seen a large number of deaf people successfully trained among their hearing peers at one of these major centers go on to good jobs.

Then a fifth modality is the sheltered workshop. I have heard the sheltered workshop both maligned and praised. We have sheltered workshops that should be maligned, and we have those that deserve the highest praise. But sheltered workshops are becoming highly diversified and efficient community facilities for evaluation, job tryout, initial job experience, elementary job training, adjustment training, and placement for the most difficult, less capable disabled person. We are sure that there is a place in the community workshop for the deaf person with severe employment problems.

We come now to the sixth modality, which in a way has been the focus of interest at this conference, the regional or national evaluation and training center for the deaf. I have mentioned it last on purpose so that it may be underlined as a new proposal of great merit; however, it is a new proposal that must be tried. We hope that it can be tried and tried soon, and the Vocational Rehabilitation Administration will help in arranging for such trials.

We must have more communication, more joint planning, and more joint endeavors to weld together our respective areas of concern for better vocational training for the deaf. I am talking about not two programs of vocational training and adjustment, one by the school and one by Vocational Rehabilitation; I am talking about a single merged, cooperative program that meets the needs of the deaf in a continuing manner so that the deaf youth never knows when he passes from one stage to the other. We hope that from this conference will come a strong recommendation for that state and regional planning which will immediately put us on the road to improved vocational opportunities for the deaf.

ANCILLARY SERVICES NEEDED FOR OPTIMUM SUCCESS

Thomas J. Dillon
New Mexico School for the Deaf

A forthright discussion of the ancillary services needed by the deaf people of America to assure optimum success in vocational assignment, training and placement must be considered a most important feature of this workshop. Success in vocational training for an individual hinges upon recognizing that individual's full potential and initiating correct assignment to a training program that will develop his skills, permit him to achieve at top capacity, and realize optimum success and satisfaction. Our success in attaining these goals for the deaf will depend upon our skill as educators, counselors and leaders in recognizing and using all possible resources.

The word "ancillary" is defined in the dictionary as (1) one who assists or serves another person; (2) an aid in achieving or mastering something difficult, complex, or obsecure; and (3) a most necessary helper or accessory. In our discussion let us keep these definitions in mind, particularly the second one.

Deaf Remarkably Self-Supporting

In a general way, most deaf people have done well as self-supporting citizens. They have been a very independent group with few to be found on welfare rolls. Yet, we are informed the percentage of deaf and hard-of-hearing people who are underemployed is probably the highest among both handicapped and nonhandicapped groups. Generally speaking, vocational training programs in our schools for the deaf have only recently begun to break away from trades that were needed primarily to provide services to the school. Vocational rehabilitation services for the deaf have not always been readily accepted by either the deaf or by the schools, and those services have not always been either highly efficient or sufficient. Continuing educational opportunities beyond the age of 21, except for the fortunate few able to go on to Gallaudet College, have been practically nonexistent. Guidance, counseling, placement, and other vocational services for deaf people have been quite far from ideal or adequate. Considering all things one can understand why Dr. Harry Best dedicated his book, "Deafness and the Deaf in the United States," to "The Most Misunderstood Among the Sons of Men, But the Gamest of Them All."

Now, we suddenly find ourselves entering a new world where society lives and works with automation. Unskilled jobs are already practically nonexistent, and semiskilled jobs in which our deaf people have thrived are rapidly becoming fewer. We are already beginning to find ourselves with a number of semiliterate and semitrained but otherwise intelligent people coming out of our schools who do not fit in this new world of automation. To succeed, the deaf person must be highly trained and possess skills and an education to fit him to cope with this new world of work and its society. Thorough and continuing educational programs, both academic and vocational, will have to be extended to our adult deaf people; adult education for the deaf must be recognized as vital.

Problem of Mental Health Growing

In comparatively recent years we have witnessed numerous changes in the student body of our schools. There is reason for us to believe that there will be further increases in the number of multiply handicapped, the number of children born totally deaf, and in the number of deaf children and adults who present emotional problems. Most of these will need ancillary services beyond those needed by our average deaf and hard-of-hearing student and adult. Studies we have seen cause us to believe that the mental health problems of the deaf and hard-of-hearing people are much greater than many of us wish to think. The physical and mental limitations of these people will have to be recognized in their early years so that training can be directed along appropriate paths for individual success.

Academic, vocational, and social direction will depend upon proficient teachers, psychologists, audiologists, guidance and social counselors, and vocational experts. Provisions must be made for the gifted, the average, and the slow learner. Instruction and guidance success will be realized only through personnel with a high degree of interest, skill in communication, and a great amount of understanding of the many and far-reaching problems of the deaf and hard of hearing. To provide all of these services adequately, there is a definite need for new groups of experts in our schools, in vocational and junior college level training programs, in Vocational Rehabilitation Service offices, and in liaison positions between training programs and industry and business. They will be needed in placement and public relations roles to sell the deaf adults who receive training; it is highly improbable that as many of our deaf people in the future will have the same good fortune as formerly in finding their own jobs.

All of education is in need of a vast amount of research. In the specialized field of education of the deaf and hard of hearing a start in educational research is only now being made. An urgent need is for stepped-up research in both the academic and vocational education problems of the deaf. Research must provide data on vocational needs, abilities and capabilities of the deaf. We need valid information on the attitudes and demands of various industries and businesses, labor unions, and insurance companies. Many of today's stumbling blocks can probably be easily removed with proper study and information; others will have to be solved. Vocational education programs must be geared to manpower needs and to union apprenticeship standards. We ask what are those needs and standards? We must develop new tests that will provide a more accurate measure of the potentials of deaf people. Our hearing-handicapped people must have a fairer chance to compete with the hearing population.

Counseling Must be Made More Accessible

Lack of proper counseling can cause many failures that we cannot attribute to lack of skill. Many of our people need so much information that the normal hearing person takes for granted. Those of you who hear, try to put yourselves in the position of the person who cannot hear, who has very limited education and little general information. What would you do if your child became seriously ill in the middle of the night? Or, if the Internal Revenue Service called you to find out why you did not pay last year's income tax or reply to any of their notices. Or, if a policeman takes your driver's license because you do not have the necessary liability insurance, something of which you never heard and few companies would sell you anyway. In all probability, you would panic just as many of these people do, and seek--not always successfully--someone who can help.

Many of our deaf people require various kinds of medical, physical, and mental therapy and other services that present a most difficult or impossible problem for them to solve or even realize. We must definitely make many more people aware of the largely invisible handicap of deafness and its many implications, particularly for those who are born deaf or lose their hearing very early in life. Certainly those who have other crippling handicaps in addition to loss of hearing require special consideration.

Additional assistance that I include as ancillary services for these people are counseling for parents of deaf and hard-of-hearing people, and interpreters in legal cases and at religious services and other important affairs. I emphasize: Our deaf people should have the same rights to these things as do the hearing.

We wish to commend the recent concern shown for the deaf in the establishing of the Captioned Films Program for the Deaf, as well as the research work being done on the Electro-telewriter, Photo-phone, and other devices to make phone communication possible for our people.

Greater Involvement Called For

There is an apparent need for involvement of certain other agencies and groups in helping us solve problems and in making the broadest possible service available to the deaf academically, vocationally, and socially. This is an area in which it is often felt that both the deaf and educators of the deaf have been rather reluctant to tread. In view of the problems that lie before us, is it not important that we re-examine this attitude and endeavor to enlist all the cooperation and services other agencies and organizations may be able to provide?

It may well be a general aim of this workshop that many of these important ancillary services, as well as others not mentioned, may some day be realized for our deaf and hard-of-hearing people.

TRENDS IN TECHNICAL AND VOCATIONAL EDUCATION

Ray Karnes, Head
Department of Vocational and Technical Education
University of Illinois

In general when we use the term "vocational education" we are talking about training programs established in schools, industrial plants, and in business establishments, which so far as complexity, rigor of the content, and demand upon the student are concerned might be considered on a secondary school level. In the main, the training programs are beamed at that category of occupations we term "skilled." The work that we have in mind is not limited at all to the skilled, bonafide, apprenticeable trades such as pattern making, cabinet making, the trade of the machinist, and so forth, but much broader; so we are thinking about trends here and vocational education across the board.

When we use the term "technical education" we have in mind work that is somewhat more rigorous, the cognitive part of the material to be learned is relatively more important. We are much more dependent upon a good background in physical science and mathematics if we are working in engineering-related fields. In the health and medical fields, it is more than likely that the biological sciences would become paramount in the development of curricula that would be appropriate for preparation in occupations that we term "technical." The worker to be prepared in such a program we call a technician.

About half the technicians in this country work in engineering-related occupations, in the work station with engineers and scientists; the other half would be scattered across a great variety of occupational categories--the health and medical field providing a large share of that half. But we also have them in the business fields, and this is one of the most rapidly developing, expanding categories of employment that we have in the entire labor force spectrum.

Some very interesting changes have occurred with reference to employment, employment opportunity, unemployment, and so forth. You will recall the concern expressed by politicians during the last two or three Presidential elections about the need for increased economic growth under the assumption that if we could achieve this we would again have full employment or at least full employment opportunity in this country. We have now reached a level of economic growth previously assumed adequate to provide full employment, yet unemployment remains one of our most difficult and most persistent problems. So, economic growth by itself has not provided full employment. There are many, many barriers to the employment other than the creation of new jobs as fast as new people require jobs or enter the labor force. We formerly assumed that high school graduation practically guaranteed employment, but that is no longer the case.

You have all expressed concern at one time or another about the great difficulty that the school dropout has in finding employment. Let's look at that group first. As of March, 1964, 31 per cent of the people who dropped out of school twelve months earlier were still unemployed. That rate is almost twice as high as it was three years previously.

What about the high school graduate? As of March, 1964, 18 per cent of the graduates of a year before who didn't go to college and didn't go into the armed services were still unemployed. I mention these things because they point out in dramatic fashion the problem that we have of educating the young deaf person for employment when with hearing high school graduates we have unemployment running as high as 18 per cent. The effort required to prepare adequately the deaf person for employment to the point that he actually can and does acquire and hold a job is immeasurably greater than is required for the hearing person.

Let's move on now to some of the factors that affect employment opportunities for people. We have seen that the increase in rate of growth has not provided full employment. One evidence of the change which has occurred in the extent to which economic activity will provide employment opportunity was drawn from a study completed in 1963 by sixty-five of the largest industrial companies and corporations in America. The sixty-five comprised the five largest firms in each of thirteen major categories. Between 1957 and 1963 all the major economic indices save one showed tremendous growth in these sixty-five companies as a group and also growth along these same dimensions in nearly all the individual companies among the sixty-five. Such things as this have shown tremendous growth: increase in capital outlay, increase in gross sales of product or service, increase in capital investment per worker, increase in production per worker.

The one major index which did not increase was that of number of workers employed. These sixty-five companies employed 300,000 few workers in 1962 than they did in 1957. That is the first five-year period in which all these things were true for these sixty-five companies. What is happening here, of course, is that in the private sector of our economy the huge increased investment in research and development is beginning to pay off i a very real way--to the point that we reduce the work force as we increase productivity and profits and as we expand along capital lines.

What does this imply for educators? We are painting a rather dismal picture here, and it leaves us with the feeling that the task of educating any group--even without a serious impairment--for work in the years ahead is a most complex and most difficult undertaking. To do this job will require an investment in money and effort that we haven't been accustomed to at all. It will require not only expansion of program, but also longer periods of time, a higher order of professional effort, and more of it.

Now, let me indicate some of the changes and trends that are occurring in the field of vocational-technical education. I think these trends give us some hope that something can be done about the problem; at least effort is being made. The two major ones that we will consider here are these: In the first place, we are seeing, partly as a result of the massive programs of Federal legislation, the rather rapid development of technical programs at the immediate post-high school level in a wide range of occupational fields. This is one of the striking developments in American education. Some of this work is being done in the two-year college (the junior community college), in newly established technical institutes, in expanded older technical institutes, and in secondary schools; and some of it is going on in industry, of course. But we are experiencing an expansion here; it has come much too late, and it is not yet big enough to do the job of preparing the sub or semiprofessional staff in the total manpower continuum. The sub-professional level of employment is expanding percentage-wise faster than any other, but numerically this is not the category of employment that will affect the largest numbers of people. That, as Mr. Stahler mentioned, is the service occupation category; and we have done relatively little here, although some promising developments are occurring.

Incidentally, we are talking about general trends and not those reflected only by the federally aided programs administered through the public schools. There are some interesting trends here, too, and some dramatic expansions; but I am talking about the total educational effort in the interest of preparing people for work. Another significant trend we see--and this is prompted in large part by recent legislative action by the Congress--is the redoubled effort to do something about the problem of educating for work those people who, unless drastic measures are taken, are destined to fall at the lower end, say the lower quarter, of the manpower continuum. I would recall here certain pieces of legislation that have been passed quite recently, starting with the National Defense Education Act of 1958. This, of course, was beamed at a different population, but that sort of broke the way for a whole raft of new socio-economic legislation that bears on this problem. The first big bill aimed directly at the economically depressed sections of the country and the people affected by this economic depression and unemployment was the Area Redevelopment Act of 1961. Then followed the Manpower Development Training Act of 1962. In 1963 we had three major laws passed: One was the Higher Education Facilities Act, one was the Mental Retardation Facilities and Construction Act, and the one that you have heard so much about is the new Vocational Education Act. More recently, this year, we have the Anti-Poverty Bill and the Economic Opportunities Act. All of these measures have implication for the further development of vocational and technical education. Most of these measures, however, have features built into them to encourage people who operate schools to establish programs that might be most useful to people who are occupationally disadvantaged; and this is the language used, for example, in the 1963 Vocational Education Act. Apparently, the problems of the school dropout, the hard core unemployed, the technologically unemployed, the displaced worker, the delinquent, and the delinquency-prone, the handicapped youth prompted Congress to adopt these measures. This is all compounded by the fact that we have had unprecedented growth in the younger age groups in our population.

But for those of you who are directly interested or involved in education of the deaf, I would think that there is some promise in the trends that we have indicated--the expansion of vocational education opportunity in such a way that we might accomplish the task of preparing for work t those people who are disadvantaged, and at the same time provide expansion of technical education opportunities in these occupational categories that are growing so rapidly. The latter are demanding categories; I would hope that eventually these trends might merge in such a way that we do a unified, coordinated effort that makes itself felt clear across the manpower spectrum so that no individual, be he seriously handicapped or otherwise, would have to suffer from lack of opportunity for the kind of education that is indicated by the dramatic changes that are occurring in the world of work.

Thank you very much.

TOPIC OUTLINES

First order of business for the Workshop participants was meeting in four groups as Topic Committees to develop outlines which would serve to focus the discussion on the four topics during the ensuing sessions.

Given below are the outlines. It was not an obligation of the discussants to address themselves to every item; rather, the outlines served as a guide to the most important aspects of each topic problem. The groups covered each topic according to the manner dictated by their interest.

* * *

Topic I: Assessment and Evaluation of Existing Vocational Training Programs

A. Prevocational, vocational and technical training programs for the deaf now operate in a variety of settings. Some serve a very limited clientele in a specific way. Others are broader in scope of service.

Are existing programs:

1. Comprehensive enough to provide for diverse interests, opportunities and aptitudes?
2. Flexible enough in adding or dropping courses as indicated by the employment picture?
3. Providing adequate evaluation, counseling, placement and follow-up services?
4. Developing proper attitudes?
5. Developing proper skills?
    a. Vocational
    b. Technical
6. Evaluating potential adequately?
7. Securing proper placement?
    a. Temporary
    b. Permanent
8. Providing adequate job information?
9. Determining wise division of time between academic and vocational preparation?

10. Providing for social and personality guidance?

11. Providing vocational opportunities in sufficient range and depth?

12. Providing for individual differences?

    a. Talented
    b. Limited

B. Existing types of programs

In what areas and with what types of client does each of the following programs function most effectively? Most ineffectively? Why?

1. Residential schools

    a. With extensive vocational opportunities
    b. With limited vocational opportunities

2. Day schools

3. Public trade and technical schools

4. College or junior college affiliated programs, e.g. Riverside, California

5. Sheltered workshops, e.g. Goodwill Industries

6. Coordinated vocational rehabilitation-school for the deaf programs

7. Vocational rehabilitation centers, e.g. Wisconsin

8. Vocational rehabilitation programs, e.g. Jewish Center in St. Louis

9. San Fernando Valley State College Adult Education Program

10. Intensive summer adult education programs, e.g. Indiana

11. Comprehensive rehabilitation center for all types of handicapped, e.g. Arkansas, Virginia

12. After-hours program in public vocational high school--deaf students only

13. Evaluation center without training facilities

* * *

Topic II: Needed Expansion of Vocational Training Programs

Assuming that there is general agreement that there is a crucial need for expansion of vocational training programs for the deaf, the school leaver who does not pursue an academic college course, the back-log of unrehabilitated deaf people, and the deaf worker displaced by automation, the following issues are presented:

I. Proposed types of facilities and area of coverage.

A. Should there be established a national vocational-technical school for the deaf?

B. Should there be regional vocational-technical schools for the deaf?

C. Should there be a national technical school for the deaf and regional vocational schools for the deaf?

D. Should the possible use of existing vocational-technical schools, using interpreters, note-takers, counselors and other supporting personnel be further studied or explored?

E. Might it be feasible to establish a comprehensive facility related in some manner to an existing university located in an urban industrial area, which would include the following:

1. Vocational training
2. Technical training
3. Remedial training
4. Cooperative work experience
5. Vocational teacher preparation
6. Vocational counselor preparation
7. Adult education programs
8. Research in vocational education for the deaf

II. Additional variations in proposals.

A. Should sheltered workshops for the multiply handicapped deaf (terminal and/or evaluational) be included in the total of facilities provided?

B. Should regional vocational counseling and diagnostic centers be a part of considerations?

C. Should adult education programs (a prototype of which has been developed at San Fernando Valley State College) be a part of the total facilities to be provided?

D. Should on-the-job training be a facet of whatever type of program is provided?

III. Indicated changes in existing programs.

A. Should the subsequent expansion of vocational facilities indicate appropriate changes in educational programs as currently constituted for deaf youngsters 18 years of age and below?

B. If the answer is yes, what should those changes be?

C. What effect will such changes have upon the holding power of our schools?

NOTE: It was agreed by the participants assigned to Topic II that vocational-technical programs under consideration are those for the deaf of post-secondary school age or following the programs of our schools as currently constituted or possibly to be changed.

* * *

Topic III: Recruitment and Preparation of Staff

Previous discussions have shown the great need for improved programs for vocational training. The discussions under Topic III will focus on the recruitment and preparation requirements for staff to implement these programs.

A. Updating the qualifications of existing vocational teachers.

1. What are included in the term "staff?"
2. Is there more involved than qualifications in upgrading?
3. What are the desirable competencies for vocational teachers?
4. Should a vocational teacher's training be more general than specific?
5. How can colleges and universities cooperate in the upgrading process?
6. How can help from labor and management be enlisted?
7. What state and local resources are available?
8. What federal resources are available?
9. What credential should be required for vocational teachers?

B. Orientation courses on deafness for people in related fields such as vocational counseling, psychology, audiology.

1. Should others, such as otologists and pediatricians be available?

2. How can effective working relationships be set up with staffs of colleges and universities to provide orientation?

3. Is there a need for orientating vocational counselors in communication procedures in working with the deaf?

  - How is this accomplished?
  - Should orientation workshops be required?

4. What is the minimum level of proficiency required in the use of manual language for workers in related fields?

5. How can vocational counselors avoid getting a distorted "image" of the deaf because of the type of clients with which they normally work?

C. Subsidization of qualified vocational educators for programs qualifying them to work with the deaf.

1. How can federal funds be utilized?

2. Should there be more dependence upon state and local resources?

3. Can private resources be tapped?

4. Should more effective public education be developed toward producing a fuller realization that education facilities must be supported more adequately?

D. Courses for leaders of labor and management to acquaint them with deafness.

1. Are we concerned with courses or procedures?

2. How can such organizations as the "Mayor's Committee" be best utilized, whose membership include representatives of labor and management?

3. What ways are effective for developing interest in training deaf workers on the part of leaders in union organizations and management?

4. What other procedures are suggested?

5. What is the effect of workman compensation laws on the attitude of management?

E. Recruitment of staff.

What are the best sources for bringing new people into vocational training for the deaf?

* * *

Topic IV: Ancillary Services

1. What ancillary services are now available that could be or are being utilized to promote improved vocational training for the deaf (local, state, regional, federal)?

2. How can the existing ancillary services be improved?

3. What ancillary services should be developed which would promote improved vocational training of the deaf (local, state, regional, federal)? For example, what ancillary services can be provided to identify skills or clusters of skills which might be incorporated into a good vocational training program for the deaf?

4. How can ancillary services best be coordinated at the local, state, regional and federal levels?

5. What federal laws provide appropriations that could be utilized to finance improved ancillary services for the deaf?

6. What additional legislation is needed to provide improved ancillary services to the deaf?

7. What procedures, rules, regulations and examinations related to obtaining employment should be alleviated or modified because of their discrimination against the deaf (local, state, regional, federal)?

8. What research is needed relative to the vocational needs and abilities of deaf people?

9. How best can research findings be disseminated nation wide to those persons who need the information and can apply the findings in practice situations?

10. What methods and techniques can be used to promote an improved understanding of the vocational assets of the deaf? Specifically how can employers be helped to become interested in the deaf and to contribute to their vocational welfare?

11. How can information regarding shortages of employers and job descriptions as it relates to the deaf be made available to the deaf and those training the deaf?

The Need for a Glossary

At a meeting of the topic editors and recorders on Sunday preceding the opening of the work sessions, a limited number of definitions were agreed upon and these were made available to the participants.

No formal action was called for, and none taken, on the subject of a glossary for workers with deaf people. It may be that at some future meeting at which are found a wide representation of spokesmen for the deaf this topic should be attacked head-on, and a body of definitions arrived at which henceforth can be adhered to by all in this field in the interest of faster progress and the elimination of a most frequent source of misunderstanding.

Herewith is given the complete memorandum of definitions provided for each conferee at the workshop's outset:

To All Workshop Participants:

Definition of certain terms which very likely will be frequently used during our meetings should serve to avoid confusion. It is recognized that more than one construction can probably--and correctly--be put upon these terms. In the interest of unity in our discussions, however, please use the following terms in light of these meanings. Thank you.

PREVOCATIONAL The development of basic attitudes, experiences, and skills, which prepare one for vocational training.

VOCATIONAL TRAINING/TECHNICAL TRAINING For purposes of workshop discussion definition of these two terms can best be achieved in a practical manner through consideration of the following classifications:

Vocational

linotype operator
body and fender man
upholsterer
plumber
electrician
carpenter
bricklayer
typist
key punch operator
power machine operator
taxi driver
nurses' aid
lens grinder
TV repairman
watch repairman
rodman
and similar occupations

Technical

dental technician
draftsman
programmer
designer
lab technician
cartographer
surveyor
and similar occupations

UNSKILLED EMPLOYMENT Occupation requiring no training.

SEMI-SKILLED EMPLOYMENT Occupation requiring a minimum of on-the-job training.

SKILLED EMPLOYMENT Occupation requiring formal vocational training.

ROSTER OF PARTICIPANTS

Edna P. Adler, Supervising Teacher
Placement Coordinator
Center for Deaf Adults
Michigan Association for Better Hearing
Lansing, Michigan

Lloyd A. Ambrosen, Superintendent
Maryland School for the Deaf
Frederick, Maryland

Robert R. Anderson, Teacher
Vocational Department
Illinois School for the Deaf
Jacksonville, Illinois

Barbara E. Babbini, First Vice President
California Association of the Deaf, Inc.
Sherman Oaks, California

Archer P. Bardes, Principal
Tennessee School for the Deaf
Knoxville, Tennessee

John C. Barner, Guidance Counselor
Tennessee School for the Deaf
Knoxville, Tennessee

Robert T. Baughman, Vocational Principal
Kentucky School for the Deaf
Danville, Kentucky

Herbert L. Benson, Professor and Head
Vocational Education
Colorado State University
Fort Collins, Colorado

Gary D. Blake, Counselor
State of Arkansas Rehabilitation Service
Hot Springs Rehabilitation Center
Hot Springs, Arkansas

Edmund B. Boatner, Superintendent
American School for the Deaf
West Hartford, Connecticut

Edward C. Carney
Captioned Films for the Deaf
Department of Health, Education and Welfare
Washington, D. C.

Edmond D. Cassetti, Director
Vocational Training
American School for the Deaf
West Hartford, Connecticut

William R. Center, Assistant Professor
Department of Special Education
University of Tennessee
Knoxville, Tennessee

W. G. Chrisman, Jr., District Supervisor
Vocational Rehabilitation Service
Woodrow Wilson Rehabilitation Center
Fishersville, Virginia

G. Dewey Coats, Vocational Principal
Missouri School for the Deaf
Fulton, Missouri

Loretta M. Craft, International
Secretary-Treasurer
Ladies Auxiliary to the International
Association of Machinists
Fort Worth, Texas

Sam B. Craig, Superintendent
Western Pennsylvania School for Deaf
Edgewood, Pittsburgh,Pennsylvania

William N. Craig, Program Director
Teacher Training
Oregon State School for the Deaf
Salem, Oregon

Alan B. Cramette, Associate Professor
Gallaudet College
Washington, D. C.

A. F. Darr, State Director
Division of Vocational Rehabilitation
Santa Fe, New Mexico

William E. Davis, Counselor for the Deaf
Division of Vocational Rehabilitation
Knoxville, Tennessee

Roberta R. DeMar
New York State Division of Vocational
Rehabilitation
Albany, New York

Lawrence DeRidder, Head and Professor
Department Education, Psychology, and Guidance
University of Tennessee
Knoxville, Tennessee

Thomas J. Dillon, Principal
New Mexico School for the Deaf
Santa Fe, New Mexico

Henry C. Edmunds, Principal
Tennessee School for the Deaf
Knoxville, Tennessee

Helen J. Evans, Director
Vocational Education for Girls
Board of Education
Chicago, Illinois

Louis J. Fant, Jr., Associate Professor
Gallaudet College
Washington, D. C.

Rober M. Frey, Head
Department of Special Education
University of Tennessee
Knoxville, Tennessee

Max Friedman
Advertising Copy, New York Times
New York, New York

David Futransky
Resident Psychologist
Civil Service Commission
Washington, D. C.

Jack R. Gannon, Printing Teacher
Nebraska School for the Deaf
Omaha, Nebraska

W. Lloyd Graunke, Superintendent
Tennessee School for the Deaf
Knoxville, Tennessee

Robert M. Greenmun, Teacher
Florida School for the Deaf
St. Augustine, Florida

Edward J. Hardwick, Assistant Professor of Audiology
University of Tennessee
Knoxville, Tennessee

Lloyd A. Harrison, Superintendent
Missouri School for the Deaf
Fulton, Missouri

Jack H. Haynes, Coordinator
Wisconsin Rehabilitation Center for the Deaf
The Wisconsin School for the Deaf
Delavan, Wisconsin

Marshall S. Hester, Project Director
New Mexico Foundation
College of Teacher Education
University Park, New Mexico

Audrey C. Hicks, Supervisor
Classes for the Deaf
Special Services Center
Houston, Texas

Ralph H. Hoag, Specialist
Educational Programs for the Deaf
Department of Health, Education, and Welfare
Washington, D. C.

H. W. Hoemann, Minister
The Lutheran Church of the Deaf
Silver Spring, Maryland

Ben E. Hoffmeyer, Superintendent
North Carolina School for the Deaf
Morganton, North Carolina

Marjoriebell Holcomb, Teacher
Indiana School for the Deaf
Indianapolis, Indiana

William J. Holloway, Superintendent
Virginia State School for the Deaf
Hampton, Virginia

Andrew D. Holt, President
University of Tennessee
Knoxville, Tennessee

Joseph Hunt, Assistant Commissioner
Vocational Rehabilitation Administration
Department of Health, Education, and Welfare
Washington, D. C.

Sidney Hurwitz
Jewish Employment and Vocational Services
St. Louis, Missouri

William D. Jackson, Administrator Coordinator
Dallas Pilot Institute for the Deaf
Dallas, Texas

A. P. Jarrell, Director
Rehabilitation Services
Division of Vocational Rehabilitation
State Department of Education
Atlanta, Georgia

Charles M. Jochem, Superintendent
New Jersey School for the Deaf
West Trenton, New Jersey

Richard K. Johnson, Supervisor
Special Education and Research
Lapeer State Home and Training School
Lapeer, Michigan

Alan B. Jones
Head of Special Services
Bureau of Vocational Rehabilitation
Industry and Labor Building
Harrisburg, Pennsylvania

Ray L. Jones, Project Director
Leadership Training in Area of Deaf
San Fernando Valley State College
Northridge, California

Uriel C. Jones, Vocational Principal
Tennessee School for the Deaf
Knoxville, Tennessee

Merle B. Karnes, Director of Special Service
City School System
Champaign, Illinois

Ray Karnes, Head
Department of Vocational and Technical
Education
University of Illinois
Urbana, Illinois

F. J. Konecny, Assistant Director
Engineering Extension Service
Texas A & M University
College Station, Texas

Harriet G. Kopp, Principal
Detroit Day School for the Deaf
Detroit, Michigan

Robert O. Lankenau, Recording Secretary
Ohio Association of Deaf
Akron, Ohio

Robert R. Lauritsen, Consultant
Deaf and Hard of Hearing
Division of Vocational Rehabilitation
180 Griggs-Midway Building
St. Paul, Minnesota

Clyde O. Lee, President
California Association of Parents of
Deaf and Hard of Hearing Children
Los Angeles, California

Edgar L. Lowell, Administrator
John Tracy Clinic
Los Angeles, California

Harold Luper, Professor and Head
Department of Audiology and Speech
Pathology
University of Tennessee
Knoxville, Tennessee

James D. Magness, Teacher
Florida School for the Deaf
St. Augustine, Florida

Kenneth R. Mangan, Superintendent
Illinois School for the Deaf
Jacksonville, Illinois

Thomas J. Mangan, Consultant
Special Education
Centennial Office Building
St. Paul, Minnesota

Walter J. Mason, Director of
Legislation
Building and Construction Trades
Department
AFL-CIO
Washington, D. C.

J. C. McAdams, Superintendent
Texas School for the Blind and Deaf
Austin, Texas

William J. McClure, Superintendent
Indiana School for the Deaf
Indianapolis, Indiana

George McFaden, Coordinator of Clinical Service
Alabama Institute for the Deaf and Blind
Talladega, Alabama

E. C. Merrill, Dean
College of Education
University of Tennessee
Knoxville, Tennessee

Leon P. Minear
Superintendent of Public Instruction
State Department of Education
Salem, Oregon

John G. Nace, Headmaster
The Pennsylvania School for Deaf
Philadelphia, Pennsylvania

James N. Orman, Supervising Teacher
Illinois School for the Deaf
Jacksonville, Illinois

Joseph T. Ott, Assistant Managing Editor
Publications Service Bureau
University of Tennessee
Knoxville, Tennessee

Roy G. Parks, Superintendent
Arkansas School for the Deaf
Little Rock, Arkansas

S. W. Patterson, Assistant Chief
Division of Special Schools and Services
State of California Department of Education
Sacramento, California

Roy K. Patton, Director of Trades and Counselor for the Deaf
Alabama Institute for the Deaf and Blind
Talladega, Alabama

Desmond Phillips
Department of Special Education
DePaul University
Chicago, Illinois

Albert Pimentel, Psychologist
Tennessee School for the Deaf
Knoxville, Tennessee

Margaret Hall Powers, Director
Bureau of Physically Handicapped Children and Division of Speech Correction
Chicago, Illinois

T. A. Prewitt
Tillar, Arkansas

Howard M. Quigley, Superintendent
Minnesota School for the Deaf
Faribault, Minnesota

John E. Radvaney, Principal
Boys' Vocational Department
New Jersey School for the Deaf
West Trenton, New Jersey

Howard H. Rahmlow, Supervising Teacher
Vocational Department
California School for the Deaf
Riverside, California

Harold H. Ramger, President
California Association for Deaf, Inc.
Oakland, California

O. E. Reece, Coordinator
Division of Vocational Rehabilitation
Department of Education
Nashville, Tennessee

Joe L. Reed, Head
Department of Industrial Education
University of Tennessee
Knoxville, Tennessee

L. Deno Reed, Consultant
Speech Pathology and Audiology
Vocational Rehabilitation Administration
Department of Health, Education, and Welfare
Washington, D. C.

Corbett Reedy, Regional Representative
Vocational Rehabilitation Administration
Department of Health, Education, and Welfare
Charlottesville, Virginia

Stanley D. Roth
Superintendent
Kansas School for the Deaf
Olathe, Kansas

Paul Rotter, Assistant to Superintendent
Lexington School for the Deaf
New York, New York

John P. Rybak
Assistant Principal and Vocational Director
St. Mary's School for the Deaf
Buffalo, New York

Lang Russel, Supervising Teacher
Vocational Department
California School for the Deaf
Berkeley, California

Robert G. Sanderson, President
National Association of the Deaf
Roy, Utah

Louis R. Schubert, Regional Representative
Vocational Rehabilitation Administration
Department of Health, Education, and Welfare
Atlanta, Georgia

Hugo F. Schunhoff, Superintendent
California School for the Deaf
Berkeley, California

John Sessions, Staff Representative
AFL-CIO
Washington, D. C.

Eldon Shipman
West Virginia School for the Deaf
Romney, West Virginia

S. Richard Silverman, Director
Central Institute for the Deaf
St. Louis, Missouri

Elizabeth J. Simpson, Chairman
Division of Hom Economics Education
College of Education
Urbana, Illinois

Mary Skinner
Lane Technical High School
Chicago, Illinois

Carl F. Smith, Superintendent
North Dakota School for the Deaf
Devils Lake, North Dakota

Alfred Sonnenstrahl
510 Hillsbora Drive
Silver Spring, Maryland

Fred L. Sparks, Superintendent
Georgia School for the Deaf
Cave Spring, Georgia

Abraham Stahler
Chief, Division of Manpower Evaluation
Office of Manpower, Automation, and Training
U. S. Department of Labor
Washington, D. C.

Lester C. Stanfill
Indiana School for the Deaf
Indianapolis, Indiana

Jean L. Stewart, Audiologist
East Tennessee Hearing and Speech Center
University of Tennessee
Knoxville, Tennessee

Merle E. Strong, Acting Director
Trade and Industrial Education
U. S. Office of Education
Washington, D. C.

E. R. Stuckless, Assistant Professor
Department of Special Education
University of Pittsburg School of Education
Pittsburg, Pennsylvania

Edward W. Tillinghast, Superintendent
Arizona State School for the Deaf and Blind
Tucson, Arizona

C. O. Tower, Assistant Supervisor
Trade and Industrial Services
University of Cincinnati
Cincinnati 21, Ohio

Donald B. Trauger, Director
Advanced-Gas-Cooled Reactor Programs
Oak Ridge National Laboratories
Oak Ridge, Tennessee

P. J. Trevethan, Executive Vice President
Goodwill Industries of America
Washington, D. C.

Norman L. Tully, Director
VRA Orientation Program
Claxton Education Building
University of Tennessee
Knoxville, Tennessee

Thomas G. Tyrrell, Senior Counselor
Vocational Rehabilitation
State Office Building
Tucson, Arizona

Ray Valencia, Counselor
Division of Vocational Rehabilitation
New Mexico School for the Deaf
Santa Fe, New Mexico

Gwenyth R. Vaughn, Head
Department of Speech Pathology and Audiology
Idaho State University
Pocatello, Idaho

McCay Vernon, Research Associate
University of Illinois
Urbana, Illinois

John M. Wallace, Superintendent
Florida School for the Deaf and Blind
St. Augustine, Florida

Arthur O. Washburn
Dean of Students
Colorado School for the Deaf
Colorado Springs, Colorado

Wilson C. Waters, Regional Supervisor
Tennessee Division of Vocational Rehabilitation
State Office Building
Knoxville, Tennessee

James H. Whitworth, Coordinator
Evaluation Center for the Deaf
Cave Spring, Georgia

Donald F. Wilkinson, Printing Instructor
New Mexico School for the Deaf
Santa Fe, New Mexico

Boyce R. Williams, Consultant
Deaf and Hard of Hearing
Vocational Rehabilitation Administration
Department of Health, Education, and Welfare
Washington, D. C.

Dale C. Williamson
Associate Regional Representative
Vocational Rehabilitation Administration
San Francisco, California

Charles E. Wilson
Division of Vocational Rehabilitation
New York District Office
New York, New York

William E. Woodrick, Counselor
Division of Vocational Rehabilitation
Department of Education
Jackson, Mississippi

Fred P. Yates, Jr.
Virginia School for the Deaf and Blind
Staunton, Virginia

Delmas N. Young
Primary Department
Tennessee School for the Deaf
Knoxville, Tennessee

Mrs. Richard Yowell
5141 Kingsley Drive
Indianapolis, Indiana

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